

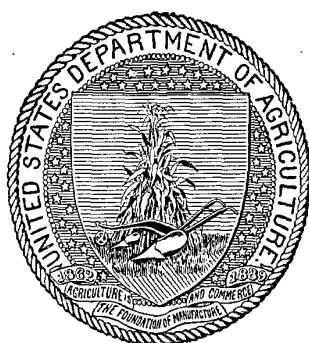
U. S. DEPARTMENT OF AGRICULTURE

CLIMATOLOGICAL SERVICE OF THE WEATHER BUREAU

DISTRICT No. 6. MISSOURI VALLEY
J. WARREN SMITH, District Editor

REPORT FOR NOVEMBER, 1909

UNDER DIRECTION OF
WILLIS L. MOORE
CHIEF U. S. WEATHER BUREAU



WASHINGTON:
WEATHER BUREAU.

Climatological Data for November, 1909.
DISTRICT No. 6, MISSOURI VALLEY.

J. WARREN SMITH, District Editor.

GENERAL SUMMARY.

The month of November was unusually warm and wet in nearly all parts of the Missouri watershed. It opened unusually warm and the highest temperatures of the month were recorded during the first decade. The temperature reached 90° in Kansas and was above 80° in all of the States, except Wyoming and Montana. Barometric depressions that came from the southwest caused heavy rain in parts of Iowa on the 1st, and in Missouri on the 7th.

An area of high pressure moved into the northern part of the district on the 7th, causing freezing weather in Montana on that date and in all but the southeastern part of the watershed on the 8th. A storm that was over North Dakota on the 10th caused unseasonably high temperatures in most sections, and, combined with another storm from the southwest, heavy rain resulted in parts of Missouri on the night of the 11th.

Another northwestern high-pressure area produced freezing weather in the northwest on the 11th and gradually overspread the district between that date and the 15th. In the mean time southwestern depressions moved across the lower part of the district and caused heavy rain or snow in Kansas and parts of Nebraska and Iowa on the 12th and 13th, and in Nebraska, Kansas, Iowa, and Missouri on the night of the 15th.

On the 17th another well-defined high-pressure area overspread the district from the northwest, causing zero temperatures in Montana and North Dakota and freezing temperature over the remaining States.

The temperature was below zero at some time during the month in all the States except Kansas and Missouri.

The precipitation was much in excess of the normal, except in North Dakota, and in most of the lower part of the watershed it was the heaviest ever recorded in November.

Very little snow fell in Missouri and only a moderate amount in Kansas. In the mountain States more of the precipitation was in the form of rain than is usual in this month, although in Colorado the snowfall was heavy, averaging 17.7 inches, with from 3 to 5 feet in the higher elevations. In South Dakota most of the precipitation was in the form of snow, while in parts of Iowa the snowfall was the heaviest ever recorded in this month.

The prevailing wind was from the northwest in North Dakota, South Dakota, and Nebraska; from the west in Wyoming, Montana, and Colorado; and from the south in Iowa, Kansas, and Missouri. The wind movement was very close to the normal.

There was more fog than usual and much more than the normal cloudiness. The percentage of possible sunshine was from 10 to 20 per cent less than the normal for the month.

The following is extracted from the reports of the section director in each State:

Wyoming.—The average temperature for the month was above the normal throughout that part of the State that is in District No. 6. The daily mean averaged from 1° to 4° above the normal. The precipitation was not very heavy, but it was above the November normal at nearly all stations. It was heavier in the mountain districts than in the plains, and although an unusual amount of precipitation was in the form of rain even at the higher elevations, the snowfall was heavy enough so that a good supply of snow accumulated in the mountains. This snow will probably be conserved until late next summer as it has fallen so early in the season. There was more than the average cloudiness during the month, and more than the usual amount of fog was reported. The sunshine averaged only about 47 per cent of the possible amount. Thunderstorms were reported at 2 stations on the 9th and at 1 station on the 24th. An aurora was observed at Echeta on the 29th. The highest temperature was 79° and the lowest -22°. The heaviest precipitation for the month was 5.39 inches, and the greatest amount in any 24 hours was 2.50 inches. The greatest monthly snowfall was 52.0 inches at the Thumb, in the Yellowstone National Park.

Montana.—The mean temperature was considerably above the normal, except over a narrow scope of country along the Canadian border and at a few high mountain stations. The warmest section was immediately east of the Continental Divide. There have been but two Novembers in the past 15 years with a materially greater precipitation. It was generally greatest in the mountain sections of the western part of the State, and the amount decreased eastward over the plains section. The precipitation all occurred in the 2 periods from the 10th to 13th and 20th to 26th. The average precipitation for the various subdrainage basins was as follows: Milk River, 0.90 inch; Marias, 0.64 inch; Sun River, 0.74 inch; Beaverhead, 1.59 inches; Madison, 1.92 inches; Gallatin, 2.49 inches; Musselshell, 1.06 inches; Yellowstone, 0.90 inch; Big Horn, 1.86 inches; Tongue, 0.90 inch; Little Missouri, 0.50 inch. There was an unusual amount of cloudiness, and the average sunshine was about 22 per cent below the normal, or about 41 per cent of the possible. The average wind velocity was 7.7 miles per hour, which is slightly less than the normal. Auroras were noticed on the 1st, 13th, and 29th. There were many reports of fog. Thunderstorms occurred on the 21st, 23d, and 24th. The highest temperature reported was 78° and the lowest -26°. The greatest monthly rainfall was 4.80 inches, and the greatest fall in 24 hours, 1.61 inches. The heaviest monthly snowfall was 41.0 inches at Jones Canyon.

North Dakota.—Generally pleasant weather prevailed throughout the district during the month, although there was a slight deficiency in the sunshine. The temperature averaged nearly 3° a day above the normal, due principally to the high day temperatures during the first decade. The second decade was the coldest, and during this period the minimum for the month was generally recorded. The precipitation was unevenly distributed, geographically, but, with the exception of the first decade, fell quite uniformly throughout the month. The average precipitation for the district was considerably below the normal and less than one-half that of the corresponding month of 1908. The wind movement during the month was nearly the average. The highest temperature was 88° and the lowest -20°. The greatest monthly precipitation was 1.04 inches. The greatest amount in any 24 hours was 1.04 inches. The greatest monthly snowfall was 10.0 inches.

South Dakota.—The mean temperature was nearly 2° below the mean for November, 1908, and 2.5° above the normal for the month. The local monthly means ranged from 40.1° in the Black Hills district to 29.0° in the upper James River Valley. The precipitation was above the normal over all parts of the State and, except in some of the southeastern counties, was nearly all in the form of snow. The precipitation was more than an inch above the normal in a number of counties in the lower James, Missouri, and Big Sioux river valleys. The averages for the principal valleys were: Missouri, 1.76 inches; James, 1.24 inches; Big Sioux, 1.45 inches; Cheyenne, 0.91 inch. There was an average of 12.5 inches of snow during the month, but it was not as a rule accompanied by high winds and, therefore, was not much drifted. The snowfall averaged greatest over the middle and lower portions of the James and Missouri river valleys, the largest amount, 25.8 inches, occurring in Yankton County. In the more elevated portions of the Black Hills district the snowfall was not so great as on the lower levels. Thawing temperatures at times reduced the depth of snow and at the close of the month there was practically none on the ground, except in some northeastern counties, and but little in the mountainous districts. Thunder was heard on the 10th in a number of southeastern counties, and near the close of the month there was an unusual amount of foggy weather. The average hourly wind velocity was 8.4 miles, and the average total movement for the month was 6,048 miles. The maximum temperature was 86° and the minimum -12°. The greatest monthly precipitation was 4.53 inches and the greatest in 24 hours 1.70 inches.

Colorado.—The month was unusually cloudy, with mild temperatures and unusually heavy snowfall. The mean precipitation was considerably in excess of any previously recorded in November, but this was probably due in part to the increased number of high-level stations. There have been several warmer Novembers but few in which there was so little severely cold weather. The mean temperature for that part of the State that is in District No. 6 was 37.9°, which is 2.3° above the normal. The average precipitation over this part of the State was 1.25 inches, or 0.64 inch above the normal. The sunshine was the least for November since instrumental records have been kept. At Denver the percentage of the possible sunshine was only 45 and was 25 per cent below the normal. The highest temperature was 85° and the lowest -6°. The greatest total precipitation was 2.41 inches, and greatest fall in 24 hours 1.00 inch. The greatest monthly snowfall was 31.0 inches.

Nebraska.—The mean temperature was decidedly above the normal throughout the State, the daily excess at most places being between 3° and 7°. The average precipitation for the State as a whole was 2.73 inches, which is the greatest amount for November on record since the year 1849. The other years with an average November precipitation exceeding 2

inches were 1852, 1855, and 1871. The precipitation in the southeastern part of the State ranged from 7 to nearly 10 inches, while the normal is about 1 inch. The precipitation and excess both materially diminished in the northern and western counties. In the valley of the Blue and the lower Missouri rivers the excess varied from 4 to 6 inches. In the Republican Valley the excess was nearly 2 inches. In the upper Missouri it was about 2.50 inches, while in the Niobrara, Loup, and upper Platte valleys the excess was about 1 inch. The cloudiness was in excess, while the number of rainy days, 6, was twice the normal number. The percentage of possible sunshine at North Platte was 60 and at Omaha 46, which is 11 per cent below the normal. The average wind velocity was 9.0 miles an hour, which is about 0.2 mile below the average for November for the past 15 years. Fog was reported on a large number of dates. An aurora was observed on the 30th. The highest temperature was 88° and the lowest -10° . The greatest monthly precipitation was 9.98 inches. The greatest amount in any 24 hours was 5.85 inches. The greatest monthly snowfall was 25.4 inches.

Iowa.—The average temperature for the State was 6.5° above the normal and was the highest for November during the past 19 years, except in 1899. The temperature was above the normal on all but 4 or 5 days of the month. The precipitation was excessive in all districts, and was well distributed throughout the month. It was the wettest November on record. The heaviest precipitation occurred between the 11th and 16th, but the amounts were heavy also on the 1st, 7th, 22d, 23d, and 28th. The amounts of snowfall over the northern counties exceeded all November records. Heavy snow fell on the 15th, 16th, 22d, and 23d and the monthly amounts ranged from 8 inches to 24.0 inches in the northern part of the State. The highest temperature was 82° and the lowest -4° . The greatest monthly precipitation was 10.33 inches and the greatest fall in 24 hours 4.08 inches. The greatest snowfall was 24.0 inches.

Kansas.—The weather for November was unusually mild, cloudy, and wet, the month having the highest mean temperature and the greatest precipitation of any November on record. The mean temperature was above the normal at all stations. The departure was the greatest in the Valley of the Kansas River, where the daily excess averaged 9° . The greatest excess in precipitation occurred in the Blue River Valley, where it ranged from 5 to 8 inches. The excess in the Kansas River Valley ranged from 8 inches in Pottawatomie County to 1 inch at its mouth. The excess in the other river valleys ranged from 2 to 6 inches. The greatest 24-hour precipitation in the Blue and Kansas river valleys was unprecedented for November. In the upper portion of the Blue River it was more than 4 inches, and in the upper portions of the Kansas River it ranged from 3 to 6 inches and occurred on the 13th. The sunshine averaged 49 per cent of the possible amount, and was 10 per cent below the normal for the month. The highest temperature was 90° and the lowest 6° . The greatest monthly precipitation was 9.58 inches and the greatest amount in 24 hours was 6.10 inches. The heaviest snowfall was 12.5 inches.

Missouri.—The month of November was the mildest and wettest during the past two decades or more. The mean temperature was continuously above the normal during the entire month, except 3 or 4 days during the second decade and 1 or 2 during the third decade. The mean temperature in the Missouri Valley to the north of the river was 6° to 8° a day above the normal, while to the south of the river, including the northern slope of the Ozark Plateau, the excess averaged 8° to 10° a day. The mean temperature for the State was 53.6° , 9.3° above the normal and 3.5° higher than the previous high mean of November, 1902. The prevailing day temperatures were remarkably high for the season of the year. One of the most noticeable features of the month was the unusually small number of days with the temperature 32° or lower, which averaged about 5 for the State. The precipitation for the month was frequent, heavy, and general, the average for the State being the greatest in 27 years. The total precipitation in the Missouri, Charitan, and Grand river valleys was from 2.50 to 7 inches, which, on an average, is about 86 per cent above the normal. Over the Osage watershed the amounts were from 3 to over 7 inches and exceeded the normal from 1.50 to 5 inches. The snowfall was light and unimportant. Thunderstorms were quite frequent, and there was more wind than usual. The sunshine was somewhat below the normal, and the relative humidity was 6 per cent higher than the normal for November. The highest temperature was 87° and the lowest 11° . The greatest monthly rainfall was 8.49 inches, and the greatest 24-hour fall was 5.50 inches. The greatest snowfall was 2 inches.

TEMPERATURE.

The average temperature was much above the normal in most of the district. The first and third decades were generally warm, while the second decade was only moderately cool. The highest temperature recorded was 90° at Enterprise, Kans., on the 3d. The lowest temperature was -26° at Augusta, Mont., on the 14th. The lowest temperature in Missouri was 11° above zero and in Kansas 6° above. It was below zero in each of the other States.

PRECIPITATION.

The precipitation was below the normal in North Dakota and part of Montana, but was above in all other portions of the dis-

trict. In much of the central and southern parts of the watershed it was the greatest ever recorded in November. The greatest monthly precipitation was 10.33 inches at Thurman, Iowa. The greatest amount in any 24 consecutive hours was 6.10 inches at Wamego, Kans., on the 13th. The heaviest snowfall for the month was 52.0 inches at the Thumb in the Yellowstone National Park.

RIVERS.

In the most of the lower part of the watershed the rivers were higher than usually recorded in November. In central and western Iowa the rivers and streams were at flood stage and overflowed the bottom lands, which was unprecedented for this month. Considerable damage was done by washouts and flooding in northeastern Kansas. Road bridges were washed away in the Valley of the Vermillion River, and damage done to railroad tracks. Transportation interests were hampered to some extent in the Blue River Valley and in Pottawatomie County, in the Kansas River Valley. At Kansas City, Mo., the Missouri River was within 3.5 feet of flood stage on the 17th, and at St. Louis the Mississippi River rose to 20.5 feet on the 20th. High water caused a suspension of work on the east land pier of the bridge at St. Louis. In Montana there was no material increase in the flow of most streams, mainly on account of the generally dry and unfrozen condition of the ground.

MISCELLANEOUS.

There was considerable interference with railroad traffic in Montana from the 24th to 27th on account of landslides caused by heavy rains and melting snow in the mountains. Some delay was caused to railroad traffic in North Dakota and South Dakota by heavy snow, and heavy rains and washouts did some damage in Kansas.

Wagon roads were very muddy and fields were rendered every unfavorable for work in parts of South Dakota, Nebraska, Iowa, Kansas, and Missouri. The rains have assured an abundant water supply for the winter, however, and have put the soil in good condition for early spring work, if the weather is favorable at that time.

Fall plowing could be carried on through most of the month. The mild and wet weather was generally favorable for winter grains, and the winter wheat and rye prospect is reported better than the average for the past 10 years in all parts of the district where these crops are raised. It is possible, however, that the top growth of the winter grains has been too rank, and that the plants are liable to be greatly damaged if unfavorable winter weather should be experienced. It is known also that a prolonged warm autumn, especially if it is extended into early winter, enables the young of the Hessian fly to become so developed as to live through even a severe winter.

A warm, wet fall tends to continue the growth of fruit trees too late and the tender shoots and partly developed buds are easily winter killed. Peach buds especially were noticeably developed at the close of the month and it is feared that severe winter weather, or any early cold spell, will be damaging.

In Montana the moderately cold spell from the 11th to 17th had the effect of retarding the grain movement from the farms to the elevators, but caused little inconvenience to railroads or stock interests.

The rains have greatly interfered with corn husking and in many places much of the corn is lying on the ground and the grain has been seriously damaged. Corn that has been put into the cribs has dried slowly in the damp weather and there is much complaint of its heating and molding.

The weather was favorable for stock interests and in the southern part of the district the pastures were green at the close of the month.

The danger of forest fires ended generally with the coming of the heavy snow. In the National Forest District No. 1, covering northern Idaho, Montana, North Dakota, Minnesota, and

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DISTRICT No. 6. CLIMATOLOGICAL SUMMARY.

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Michigan, it is reported that the total cost of extinguishing fires for the past season has been a little over \$15,000, as against approximately \$30,000 in 1908.

The forest supervisor of the Kansas National Forest reports that on November 27 and 28 a heavy rain fell, turning into sleet the evening of November 28. It lasted 12 hours and caused a great deal of damage in the way of breaking down telephone wires and poles. Large branches of trees and in many cases trees were broken off, as a heavy wind from the north accompanied the storm.

Snow and cold weather interfered with the United States Reclamation Servicework to some extent on the Milk River Project in Montana, the Belle Fourche Project in South Dakota, and the Shoshone Project in Wyoming. The irrigation season was closed on the Shoshone Project on November 13. At the Garden City Project, Kansas, the river water was available for irrigation throughout the month, but was used for that purpose on only 9 days.

The wet weather of the past summer and fall has emphasized the importance of draining farm lands, and it is estimated by the county surveyors in Union, Page, Lyon, and Clay counties, Iowa, that a total of over 800 miles of tile were laid, or preparations made for laying the same, in those counties during the month.

In Pottawattamie County, Iowa, mutual ditch drainage work just completed or under contract contemplates over 30 miles of ditches, draining 24,800 acres. Plans for other ditches 34 miles in length will be ready for contract in 1910.

Plans are being laid for the construction of a large ditch in Shelby County, Iowa, that will straighten the branch of the river running from Defiance to Harlan, a distance of 15 miles.

A river-straightening petition in Page County, Iowa, contemplates the construction of a new river channel about 40 miles in length that shall take the place of 83 miles of channel now being used by the river. The cost will be approximately \$300,000, and 25,000 acres of overflowed land will be reclaimed.

DISTRICT NO. 6. CLIMATOLOGICAL SUMMARY.

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TABLE 1.—Climatological data for November, 1909. District No. 6, Missouri Valley.

Stations.	Counties.	Elevation, feet.	Length of record, yrs.	Temperature, in degrees Fahrenheit.						Precipitation, in inches.						Sky.	Prevailing wind direction.	Observers.	
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall unmeasured.	Number of rainy days, .10 inch or more.	Number of clear days.	Number of partly cloudy days.	Number of cloudy days.	
<i>Wyoming.</i>																			
Arapahoe.....	Fremont.....	27.2	.....	50	3†	-16	15	20	0.39	.....	0.21	4.5	2	3	6	21	sw.	David Malloy.
Barnum.....	Johnson.....	5,500	4	35.2	+ 2.8	67	5	0	14	41	0.51	0.25	5.0	3	16	5	w.	Thos. Freeguard.	
Basin.....	Big Horn.....	3,856	10	35.2	+ 2.8	67	5	0	14	41	0.37	+ 0.24	0.37	0.0	1	10	5	nw.	O. J. Robertson.
Bennett.....	Carbon.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.81	0.18	6.8	9	3	15	w.	Chas. C. Young.
Cheyenne.....	Laramie.....	6,088	33	38.6	+ 3.7	70	4	10	15	36	0.73	+ 0.32	0.37	6.1	7	6	9	15	U. S. Weather Bureau.
Cheyenne Exp. Farm.....	6,000	3	38.0	+ 2.2	73	6†	9	15	47	0.50	- 0.03	0.25	5.0	4	18	11	1	Irrigation Inves. Office.
Chugwater.....	.....	5,282	3	38.6	.....	68	3	1	15	27	1.13	0.64	8.0	9	8	4	18	George Milne.
Clark.....	Big Horn.....	4,320	4	38.6	.....	68 ^b	3	68	14	40 ^a	0.239	0.23	3.7	1	78	10 ^b	34	Chas. A. C. Snow.
Crystal Lake Reservoir.....	Laramie.....	6,900	3	38.9 ^b	.....	68 ^b	3	68	14	40 ^a	0.239	0.23	3.7	1	78	10 ^b	34	L. E. Jenson.
Douglas.....	Converse.....	4,793	41.8	74	4	- 1	28	41	0.37	0.15	0.40	15.0	6	5	19	9	2	Henry C. Miller.	
Dubois.....	Fremont.....	6,909	3	34.0	.....	62	3	- 13	15	39	0.63	0.17	1.5	6	9	11	10	Dr. F. H. Welty.
Eaton's Ranch.....	Sheridan.....	4,600	4	41.4	.....	78	3	1	14	37	0.60	0.26	0.0	4	6	22	2	F. A. Eaton.
Echeta.....	Crook.....	4	.....	.....	.....	.....	.....	.....	.....	.....	0.93	0.32	13.0	7	14	5	11	M. R. Hunter.
Elk Mountain.....	Carbon.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.93	1.31	20.5	5	10	10	10	Wm. Richardson.
Encampment.....	.....	7,322	35.2	63	3	10	17	33	1.31	0.70	3.2	7	14	6	10	sw.	U. S. Forest Service.	
Ervay.....	Natrona.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Frank Jameson.
Filmore.....	Albany.....	7,527	3	37.8	+ 3.1	79	3	0	16	56	1.50	0.40	15.0	6	5	19	9	Jas. Dougherty.	
Fort Laramie.....	Laramie.....	4,270	32	37.8	.....	51	3†	- 8	15	52	1.66	+ 1.30	0.66	5	19	9	2	John Hunton.
Gillette.....	Crook.....	4,546	3	43.6	.....	66	3	7	15	42	0.52	0.20	5.5	6	13	7	10	S. D. Perry.
Granite Canyon.....	Laramie.....	7,337	4	36.8	.....	61	3	- 3	15	49	1.22	0.56	19.0	8	18	6	6	Wm. Boyce.
Hunter's Station.....	Johnson.....	8,000	3	32.4	.....	61	3	- 1	15	40	0.53	0.29	5.5	6	11	6	13	August Hettinger.
Hyattville.....	Big Horn.....	6,632	10	37.2	+ 0.7	71	2†	- 1	15	40	0.53	0.33	6.0	7	10	8	10	Wm. Booth.	
Independence.....	Natrona.....	.....	32.6	.....	.....	64	5	- 7	16	36	0.70	0.34	7.5	5	14	7	9	Henry D. Schoonmaker.
Kaycee.....	Johnson.....	8	.....	.....	.....	71	4	4	16	44	0.74	0.31	11.0	4	15	8	7	A. Grigg.
Kirkley.....	Converse.....	5	36.6	.....	.....	69	3†	- 8	15	52	5.10	0.50	8.0	5	13	8	9	D. M. Zum Brunnen.
Kirwin.....	Big Horn.....	9,187	1	27.0	.....	51	3†	- 8	15	52	5.10	0.99	0.50	51.0	13	13	8	C. L. Tewksbury.
Knowles.....	Crook.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.99	0.50	8.0	5	13	7	G. A. Knowles.	
Lander.....	Fremont.....	5,372	17	33.4	+ 4.7	67	2	- 4	15	40	1.42	+ 0.83	0.70	14.2	4	7	16	7	U. S. Weather Bureau.
Laramie.....	Albany.....	7,188	18	38.1	+ 4.4	67	3	- 2	16	38	0.99	+ 0.04	0.17	6.6	4	8	12	10	University of Wyoming.
Leo.....	.....	6,878	8	35.6	+ 3.1	64	3	- 3	28	46	0.53	+ 0.19	0.29	5.5	6	11	6	C. A. Cowdin.
Lolabomas Ranch.....	Big Horn.....	7,052	6	30.6	.....	62	5†	- 9	14	43	1.08	0.33	6.0	7	10	6	14	Mary E. Painter.
Lovell.....	.....	4	35.5	.....	69	3†	- 3	15	43	0.39	0.12	1.5	5	14	5	11	R. Fred Harrison.	
Lusk.....	Converse.....	5,007	19	36.9	+ 4.1	72	3	3	15	42	0.50	0.50	7.0 ^c	1 ^c	.....	.....	.....	D. E. Goddard.
Luther.....	Laramie.....	.....	40.9 ^c	.....	74 ^c	3	12 ^c	23	42	0.50 ^c	0.20	3.2	3	10	15	5	Henry D. Colburn.	
Manville.....	Converse.....	5,050	6	33.7	.....	76	3	- 22	6	57	1.30	0.80	13.0	4	22	0	8	C. A. Sherman.
Moocroft.....	Crook.....	4,211	6	33.7	.....	76	3	- 22	6	57	1.30	0.80	12.0	5	18	6	6	Jas. K. Somers.
Moore.....	Albany.....	6,000	8	39.7 ^a	+ 2.2	71 ^a	2	5 ^a	15	45 ^a	0.87 ^a + 0.38	0.56 ^a	6.3 ^a	6 ^a	5 ^a	14 ^a	10	Edwin Moore.	
Newcastle.....	Weston.....	4,319	2	35.0	.....	70	2	4	16	36	1.08	0.30	8.5	4	18	7	5	Dr. S. W. Johnson.
Pathfinder.....	Natrona.....	5,735	3	.....	.....	70	3	0	15	40	0.68	0.30	6.8	5	19	4	7	U. S. Reclamation Service
Phillips.....	Laramie.....	4,900	6	39.2	.....	71	3	0	15	40	0.68	0.30	6.8	5	19	4	7	Mrs. Arthur Rugg.
Powell.....	Big Horn.....	5,038	2	34.8	.....	71	3	- 1	15	40	0.32	0.20	3.2	3	10	15	5	U. S. Reclamation Service
Riverton.....	.....	4,376	2	34.8	.....	71	3	- 10	15	40	0.32	0.20	3.2	3	10	15	5	Robert P. Quest.
Saratoga.....	Fremont.....	7,300	12	36.6	+ 4.1	69	3	2	28	45	0.92	+ 0.30	0.40	6.3	6	13	10	7	Supt. S. & E. R. R.
Sheridan (1).....	Sheridan.....	3,790	14	34.8	+ 2.5	74	3	- 2	15	47	0.99	+ 0.31	0.39	10.4	9	6	11	13	U. S. Weather Bureau.
Sheridan (2).....	3,738	14	35.4	+ 2.1	77	3	- 2	15 ^a	52	1.10	+ 0.42	0.64	10.0	4	10	13	7	Geo. Brundage.
Shoshone Dam.....	Big Horn.....	5,355	3	30.4	.....	72	4	- 1	15	39	0.91	0.59	6.6	7	11	12	7	U. S. Reclamation Service
Soldiers' Home.....	Johnson.....	4,635	17	38.2	+ 1.9	71	2	0	15	49	1.09	0.90	19.0	4	4	24	2	Geo. L. Courtney.	
South Pass City.....	Fremont.....	.....	28.7	.....	58	3	- 4	28	36	1.51	0.79	5.8	10	9	11	10	John Sherlock.	
Thermopolis.....	.....	4,350	7	36.2	.....	74	3	- 10	15	50	0.53	0.31	6.0	4	18	10	2	A. L. Duhig.
Upton.....	Weston.....	.....	6,500	.....	.....	.....	.....	.....	.....	.....	0.95	0.25	9.5	8	12	6	12	G. E. McPherran.
Valley.....	Big Horn.....	6,500	.....	.....	.....	.....	.....	.....	.....	.....	0.60	13.0	10	11	12	7	Jas. L. McLaughlin.	
Verona.....	Sheridan.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.50	11.0	4	5	15	10	O. A. Roode.	
Wiley.....	Big Horn.....	5,375	37.0	69	3	- 5	15	35	0.68	0.47	9.3	3	19	5	6	C. D. Marshall.			
Wyncote.....	Laramie.....	4,207	2	38.7	.....	77	3	1	15	54	0.90	0.50	12.0	5	10	13	7	U. S. Reclamation Service
Yellowstone Park.....	National Park.....	6,200	22	30.8	+ 1.5	57	5	1	14	29	1.16	- 0.28	0.41	4.9	14	6	18	U. S. Weather Bureau.	
(1) Fountain.....	.....	.....	26.7	.....	53	3†	- 13	14	41	3.22	0.80	9	14	1	15	15	U. S. Army.	
(2) Grand Canon.....	.....	22.4	.....	41	4	1	27	30	3.85	3.27	0.80	44.5	14	6	8	18	ne.	
(3) Lake Hotel.....	.....	7,723	5	24.6	.....	51	4	- 4	15	34	3.27	1.06	17.0	7	9	0	21	Do.
(4) Norris Geyser.....	.....	7,525	5	28.2	.....	52	3	0	27	34	2.11	2.50	....	12	8	9	13	Do.
(5) Riverside.....	.....	6,500	3	25.0	.....	56	4†	- 4	28	38	4.83	0.50	9.0	6	13	8	9	Do.
(6) Soda Butte.....	.....	7,000	4	29.6	.....	59	4	- 15	14†	41	1.73	0.80	34.0	10	18	1	11	Do.
(7) Sylvan Pass.....	.....	7,000	2	28.4	.....	55	4	0	12	34	4.28	1.05	52.0	13	10	11	9	Do.
(8) Thumb.....	.....	26.6	.....	54	3	- 3	28	33	3.59	3.39	0.80	2.77	8	14	5	11	Do.	
(9) Tower Falls.....	.....	30.6	.....	62	3	- 6	14†	42	0.31	0.20	0.20	0.20	4	12	1	17	Do.	
(10) Upper Basin.....	.....	7,395	5	28.2	.....	53	3†	- 5	12	39	0.59	0.20	....	4	12	1	17	T. H. Busteed.
Adams.....	Dawson.....	1	32.4	.....	68	2	- 7	15	40	0.14	0.06	5.0	3	7	11	12	W. B. Ennis.	
Agricultural College.....	Cascade.....	5,200	11	34.2	.....	64	3	- 7	15	35	1.20	0.43	4.0	6	7	5	18	B. F. Burch.
Augusta.....	Gallatin.....	4,700	10	34.2	+ 2.5	6													

NOVEMBER, 1909.

DISTRICT NO. 6. CLIMATOLOGICAL SUMMARY.

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TABLE 1.—Climatological data for November, 1909. District No. 6—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, yrs.	Temperature, in degrees Fahrenheit.					Precipitation, in inches.					Sky.			Observers.				
				Mean,	Departure from the normal.	Highest.	Date,	Lowest.	Date,	Greatest daily range,	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall unmelted.	Number of rainy days 0.1 inch or more.	Number of clear days.	Number of partly cloudy days.	Number of cloudy days.			
<i>Montana—Cont'd.</i>																					
Cut Bank.	Teton.	3,700	11	29.4	+ 2.2	59	3†	-17	15	41	0.38	- 0.78	0.20	3.5	4	15	6	w.	Chas. N. Thomas.		
Decker.	Rosebud.	3,400	5	33.0	.....	61	5	-10	16	50	0.90	.....	0.50	4.0	2	8	9	w.	Adam Anderson.	
Deep Creek.	Broadwater.	4,200	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.63	2.7	9	6	13	w.	Mrs. D. W. Maryott.		
Delphine.	Meagher.	5,000	.....	.....	.....	.....	.....	.....	.....	.....	0.64	0.17	16.8	5	6	18	6	w.	Tracy L. Holliday.	
Denton.	Fergus.	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	R. M. Chamberlain.	
Dillon.	Beaver Head.	5,147	12	37.2	+ 2.4	71	3	- 8	15	46	0.92	+ 0.12	0.20	4.7	11	11	6	13	sw.	J. E. Monroe.	
Dirty Creek.	Meagher.	6,000	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.95	0.31	11.9	7	13	6	11	w.	Lewis Cameron.
Dry Creek.	Broadwater.	5,500	.....	.....	.....	.....	.....	.....	.....	.....	.....	3.64	1.61	6.1	12	7	10	13	nw.	J. C. Stuart.
Dry Wolf Camp.	Cascade.	6,000	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.80	0.23	12.4	7	12	6	12	sw.	Mrs. R. J. Eveleth.
East Gallatin River.	Gallatin.	6,300	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.89	0.66	16.0	5	11	6	13	w.	John Eberhart.
Ekalaka.	Custer.	8	35.4	+ 2.5	78	2	- 3	15	54	0.50	.....	0.20	5.0	3	13	7	10	w.	W. Freese.	
Elkhorn.	Jefferson.	6,576	.....	.....	.....	.....	.....	.....	.....	.....	1.74	0.65	12.5	12	3	16	11	sw.	J. W. Skelton.	
Evans.	Cascade.	4,900	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	H. Thrasher.	
Fallon.	Custer.	2,208	5	32.2	.....	73	5	-13	16	50	0.35	.....	0.15	1.5	3	17	6	7	w.	Mrs. A. C. Gifford.
Family.	Teton.	3,930	1	30.6	.....	61	29	-20	15	52	0.90	.....	0.27	5.1	7	22	6	w.	U. S. Reclamation Service.	
Fish Creek.	Silver Bow.	8,500	28.3	.....	.....	52	3	- 6	14	28	2.61	.....	0.72	32.5	7	16	3	11	w.	O. B. Tilton.
Fish Tail Creek.	Carbon.	5,000	.....	.....	.....	.....	.....	.....	.....	.....	0.76	.....	0.30	9.1	4	14	9	7	w.	O. E. Haskin.
Flathead Creek.	Gallatin.	6,000	.....	.....	.....	.....	.....	.....	.....	.....	4.08	0.84	27.1	10	6	9	15	dw.	L. G. Brown.	
Forsyth.	Rosebud.	2,514	3	35.4 ^a	.....	78 ^a	3	- 9	15	49 ^a	0.40	.....	0.15	2.5	3	5 ^a	7 ^a	5	dw.	Thos. M. Patterson, Jr.
Fort Benton.	Chouteau.	2,630	30	34.4	+ 2.7	68	4	- 8	15	29	0.70	+ 0.15	0.40	7.0	2	20	10	0	sw.	River Observer.	
Fort Shaw.	Cascade.	3,500	21	35.4 ^a	+ 2.2	68 ^a	3	-20 ^a	15	47 ^a	0.84	+ 0.42	0.28	7.5	5	23	3	4	sw.	U. S. Reclamation Service.	
Fort W. H. Harrison.	Lewis & Clark.	4,004	6	35.2	.....	67	3	0	14	39	.....	.....	.....	.....	17	9	4	w.	Post Hospital.	
Foster.	Yellowstone.	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	E. K. Bowman.	
Garnet.	Fergus.	5,500	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. E. Scally.	
Glendive.	Dawson.	2,069	20	33.2	+ 3.4	73	3	- 9	16	44	0.44	- 0.13	0.20	5.0	3	15	7	8	n.	W. B. Walker.	
Goldbutte.	Chouteau.	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. T. Berthiote.	
Graham.	Custer.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. S. Rue.	
Grayling.	Gallatin.	6,700	6	25.4 ^a	.....	55 ^a	3†	-13 ^a	15	41 ^a	1.87	.....	0.41	6.0	14	8 ^a	12 ^a	sw.	P. Kerzenmacher.	
Great Falls.	Cascade.	3,350	18	35.8	+ 1.0	70	3	- 12	15	46	1.03	+ 0.23	0.23	9.2	9	10	15	5	sw.	S. H. Bauman.	
Half Moon Pass.	Fergus.	6,500	.....	.....	.....	.....	.....	.....	.....	.....	1.60	.....	0.50	22.2	8	3	23	4	w.	Thos. Stigen.
Half Way House.	Broadwater.	6,000	.....	.....	.....	.....	.....	.....	.....	.....	3.63	.....	1.43	14.5	11	20	5	5	sw.	Gordon Deans.
Harlowton.	Meagher.	4,165	2	33.1	.....	69	3	- 16	15	52	1.50	.....	0.45	15.0	6	7	8 ^a	15	w.	Jos. Muir.
Hassel.	Broadwater.	5,200	.....	.....	.....	.....	.....	.....	.....	.....	0.70	.....	0.22	1.8	6	0	25	5	nw.	E. C. Albrecht.
Havre.	Chouteau.	2,505	29	29.0	+ 1.6	66	3	- 16	15	42	1.01	+ 0.24	0.34	9.5	11	3	11	16	sw.	U. S. Weather Bureau.	
Helena.	Lewis & Clark.	4,110	30	36.2	+ 3.5	68	3	- 2	15	32	0.51	- 0.21	0.18	2.9	7	4	12	14	sw.	U. S. Weather Bureau.	
Highwood.	Chouteau.	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.06	.....	0.60	8.0	4	7	8	15	sw.	W. S. McCord.
Home Park.	Madison.	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.73	.....	0.40	7.0	5	13	2	15	s.	H. L. Miller.
Hunley.	Yellowstone.	3,014	4	35.6	.....	75	3	- 10	15	46	0.65	.....	0.28	9.0	4	15	8	7	e.	U. S. Reclamation Service.
Jones Canyon.	Gallatin.	6,800	.....	.....	.....	.....	.....	.....	.....	.....	3.80	0.84	41.0	13	.....	.....	.....	.....	w.	Jas. McCune.
Jordan.	Dawson.	5	33.0	73	3	- 21	14	61	0.20	0.20	2.0	1	W. S. Henderson.
Kleinsmith Creek.	Jefferson.	6,000	.....	.....	.....	.....	.....	.....	.....	.....	1.54	0.80	4.8	9	4	24	2	w.	Mrs. E. W. Mills.	
Lewistown.	Fergus.	4,010	12	35.2	+ 2.6	68	4†	- 12	15	39	0.91	0.00	0.31	8.0	6	14	8	8	w.	W. W. Watson.	
Livingston.	Park.	4,488	11	39.6	+ 3.4	70	3	3	15	34	1.73	+ 0.81	0.45	16.0	10	12	3	15	sw.	Lewis Terwilliger.	
Lodge Pole Creek.	Sweetgrass.	5,700	.....	.....	.....	.....	.....	.....	.....	.....	1.85	0.58	16.0	5	9	10	11	sw.	F. G. White.	
Lone Tree.	Chouteau.	5	37.0 ^b	.....	74 ^b	5	- 15 ^b	15	45 ^b	0.90	.....	0.38	6.0	5	16	6	8	w.	E. Wilson.	
Lost Horse Creek.	Meagher.	5,800	.....	.....	.....	.....	.....	.....	.....	.....	0.95	0.23	13.5	9	10	14	6	w.	C. M. Mason.	
Lubee.	Teton.	5,048	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.22	6.2	11	14	7	9	w.	U. S. Reclamation Service.
Malta.	Valley.	2,240	3	28.4	.....	70	3	- 12	15	42	0.84	.....	0.22	2.0	1	.....	.....	.....	.....	F. E. Parent.
Meadow Creek.	Madison.	6,700	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.22	6.2	11	14	7	9	w.	E. J. Parkinson.
Melstone.	Fergus.	2,903	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.22	6.2	11	14	7	9	w.	Leot B. Clark.
Mildred.	Custer.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	U. S. Weather Bureau.
Miles City.	.....	2,371	15	35.6	+ 4.7	76	3	- 5	16	43	1.19	+ 0.59	0.64	5.8	9	11	13	6	se.	W. H. Edick.
Mill Creek.	Park.	5,500	.....	.....	.....	.....	.....	.....	.....	.....	1.28	0.53	9.0	5	11	7	12	w.	Clyde Grove.	
Mudd Creek.	Fergus.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Emery Mudd.	
Deer Lodge.	Madison.	4,845	3	35.0	.....	78	4†	- 6	16	50	1.57	.....	0.42	7.0	13	13	4	13	s.	Madison River Power Co.
Norris.	Madison.	5,000	1	32.9	.....	63	5	- 4	15	47	1.71	.....	0.34	15.2	11	13	6	11	sw.	F. L. Bryant.
Nye.	Sweetgrass.	1	32.9	.....	.....	.....	.....	.....	.....	.....	2.57	.....	0.69	13.0	10	5	11	14	w.	Robt. Olsen.
Olsen Creek.	Jefferson.	6,345	5	30.5	.....	.....	.....	.....	.....	.....	1.07	.....	0.35	20.5	8	10	13	7	sw.	Mrs. Theola Kiermeyer.
Pipestone Pass.	Jefferson.	7,000	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.35	17.3	7	8	14	sw.	H. M. Cosier.	
Poplar.	Valley.	2,020	25	30.5	+ 3.3	69	5	- 11	15	43	0.60	+ 0.07	0.20	6.0	4	21	1	8	w.	E. A. Reber.	
Raymond.	Carbon.	6,000	2	34.0	.....	70	3	- 7	15	36	0.76	.....	0.21	6.6	9	12	6	12	se.	I. A. Draper.
Rebers Ranch.	Red Lodge.	5,548	9	34.0	+ 0.9	70	3	- 7	15	36	0.76	.....	0.90	29.0	9	10	7	13	sw.	Henry Cramer.
Red Lodge.	Gallatin.	5,000	.....	.....	.....	.....	.....	.....	.....	.....	4.30	.....	0.42	6.5	9	14	4	12	sw.	F. B. Elmer.
Reese Creek.	Jefferson.	4,383	10	36.6	.....	70	3	- 5	15	40	1.74	.....	0.40	17.3	7	8	14	sw.	Milo Brooks.	
Renova.	Lewis & Clark.	7,900	1	31.4	.....	55	18	0	13	22	0.74	.....	0.37	4.6	3	21	1	8	w.	H. W. Scherlenberg.
Rimini.	Gallatin.	3,155	2	32.2	.....	61	3	- 9	15	37	2.11	.....	0.45	21.3	14	7	9	14	w.	Jas. W. Hargrove.
Ryegate.	Dawson.	4,500	8	32.1 ^{a</}																	

DISTRICT No. 6. CLIMATOLOGICAL SUMMARY.

NOVEMBER, 1909

TABLE 1.—Climatological data for November, 1909. District No. 6—Continued.

Stations	Counties.	Elevation, feet.	Length of record, yrs.	Temperature, in degrees Fahrenheit.				Precipitation, in inches.				Number of rainy days, .01 inch or more.	Number of clear days.	Number of partly cloudy days.	Number of cloudy days.	Prevailing wind direction.	Observers.		
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.								
<i>North Dakota—Cont'd.</i>																			
Fulterton.	Dickey.	1,439	10	28.2	- 0.8	70	6	- 18	15†	42	1.00	+ 0.40	0.70	10.0	3	12	s.	F. O. Alin.	
Haley.	Bowman.	1	39.2			88	7	14	36	0.41			0.37	4.8	5	9	nw.	Myra Hart.	
Hettinger.	Adams.	2,253	2	40.9		74 ^a	3	7	17	28 ^a	0.55		0.20	5.5	3	1	23	F. E. Ellickson.	
Howard.	Williams.	2,275	2														C. B. Amsbaugh.		
Jamestown.	Stutsman.	1,390	21	29.0	+ 2.8	67	6	2	22†	45	0.60	- 0.21	0.50	6.0	4	5	19	L. B. Baldwin.	
Kulm.	Lamoure.	1,966	4														J. F. Brenckle.		
Lamoine.	Kidder.	1	28.8			64	3†	- 10	15	39	T.		T.	T.	0	14	E. V. Virgin.		
Lamoine.	Lamoure.	1,307	2			63	3	- 10	15	43	0.20		0.10	2.10	2	9	12	A. H. Ormsby.	
Manfred.	Wells.		28.9										0.19		0.06	5.0	6	sw.	
Marmarth.	Bowman.		1										0.40		0.30	4.0	2	w.	
Marstonmoor.	Stutsman.		1														H. H. McCumber.		
Medina.	do.	1,796	4														M. Dwyer.		
Medora.	Billings.	2,225	12	31.0	+ 2.0	80	4	- 20	15	58	1.04	+ 0.76	1.04	3.8	2	10	8	sw.	
Melville.	Foster.	1,590	11	26.4 ^c	+ 1.9	58 ^c	2	- 10	15	52 ^c	0.30	- 0.01	0.30	3.0	1			J. W. Hesser.	
Mott.	Hettinger.	2	3.02			68	3	- 14	21	40	0.70		0.21	10.0	7	8	10	J. P. Kidder.	
Napoleon.	Logan.	1,955	17	28.2	+ 2.9	67	4	- 16	15	47	0.35	- 0.47	0.35	4.0	1	17	2	O. H. Opland.	
New England.	Hettinger.	2,400	13	31.0	+ 3.5	69	4	0	13	53	0.90	+ 0.34	0.40	9.0	5	14	2	C. J. Hoof.	
New Salem.	Morton.	2,163	2	23.3 ^d		68	3†	0 ^a	16	40 ^a	0.42		0.20	5.0	3	11	10	W. C. McKenzie.	
Orange.	Adams.	2	30.4			72	2	- 7	15	50	0.60		0.50	8.0	2	10	8	J. Christiansen.	
Palermo.	Ward.	2,200	5	32.9		60	3†	7	15	30	0.10		0.10	1.0	1	9	11	J. E. Goforth.	
Steete.	Kidder.	1,857	13	29.7	+ 3.4	66	3†	- 7	15	41	0.15	- 0.28	0.15	1.5	1	13	5	T. A. McCann.	
Swartwood.	Bowman.		1										0.51		0.14	T.	7	B. C. Smith.	
Washburn.	McLean.	1,731	5	30.5		68	3	0	21	41	0.11		0.06	2.3	2	12	6	W. F. Adams.	
Williston.	Williams.	1,875	29	28.3	+ 3.1	68	2	- 10	15	41	0.20	- 0.40	0.12	2.0	2	5	4	W. R. Peterson.	
Wishek.	McIntosh.	2,010	4	31.3 ^c		70 ^c	2	- 17 ^c	15	47 ^c	0.20		0.15	2.0	2			H. E. Timms.	
<i>South Dakota.</i>																			
Aberdeen.	Brown.	1,300	20	29.0	+ 0.5	75	6	- 5	15	44	1.18	+ 0.28	0.80	12.0	4	11	5	D. G. Gallett.	
Academy.	Charles Mix.	21	36.3	- 0.6		80	6	7	15†	51	1.62	+ 1.22	0.65	17.0	6	12	9	I. T. Lothrop.	
Alexandria.	Hanson.	1,352	21	37.8	+ 5.3	77	6	6	15	35	1.92	+ 1.32	1.07	15.5	4	13	10	W. S. Hill.	
Andover.	Day.	1,476															E. L. Stone.		
Ardmore.	Fall River.	3,557	1														C. G. Hurlbut.		
Armour.	Douglas.	1,521	16	37.2 ^c		81	4	0 ^a	17	47 ^c	1.00		0.40	10.0	6	19	6	J. S. Bean.	
Ashcroft.	Harding.	3,192	18			77	4	0	18 ^c	39	2.39	+ 1.38	1.49	15.0	4	16	5	Thos. Ashcroft.	
Belle Fourche.	Butte.	3,000	2	34.0		75	3	- 8	17	52	0.65		0.30	7.1	7	5	8	W. H. McGinley.	
Bowdle.	Edmunds.	1,995	15														C. T. Smithers.		
Brookings.	Brookings.	1,636	22	33.8	+ 4.3	75	4†	- 2	21	43	0.65	+ 0.06		5.5	6	10	13	Prof. C. Willis.	
Burke.	Gregory.	2	36.1 ^c			81	4	1 ^a	16†	40 ^a	1.05		0.40	10.5	5	19	2	James Connell.	
Canton.	Lincoln.	1,248	14	36.2	+ 2.3	77	4	0	18 ^c	39	2.39	+ 1.38	1.49	15.0	4	16	5	John H. Holsey.	
Cascade Springs.	Fall River.	3,422	2	35.1		75	4	2	16	56	1.50		0.58	12.5	5	10	6	Fred Norenberg.	
Castlewood.	Hamlin.	1,685	4	32.4		75	4	- 3	21	43	0.73		0.58	7.2	6	9	M. N. Bradley.		
Centerville.	Turner.	1,229	5	36.3	+ 0.1	77	6	2	17	46	2.81	+ 2.14	0.63	21.2	10	6	3	Frank Williams.	
Chamberlain.	Brule.	1,363	12										1.21	+ 0.85	0.73	15.0	2	G. A. Fry.	
Clark.	Clark.	1,779	16	32.4	+ 2.0	74	6	- 5	21	36	1.25	+ 0.51	0.50	12.5	6	11	10	O. H. La Craft.	
Clear Lake.	Deuel.	1,800	7														L. F. Hanly.		
Clifton.	Sully.																H. F. Chamberlain.		
Cottonwood.	Stanley.		35.6			79	9	- 7	16	51	0.41		0.12	7.5	9	13	8	W. Sussex.	
Daviston.	Perkins.		30.6			79	6	- 5	16	58	0.50		0.25	5.0	3	5	15	G. G. Davis.	
Deadwood.	Lawrence.	4,535	1	38.8		71	3	3	14	42	0.80		0.50	5.9	2	17	5	R. E. Grimshaw.	
De Smet.	Kingsbury.	1,726	18	34.5	+ 4.1	77	4	1	17†	39	0.60	- 0.09		0.20	6.0	4	16	J. O. Purinton.	
Dowling.	Stanley.	2,250	1	35.8		79	6	- 3	16	46	1.93		0.60	22.0	8	11	5	M. P. Dowling.	
Dumont.	Lawrence.	6,195	1										0.82		0.25	7.0	5	A. B. Wood.	
Elk Point.	Union.	1,127	11	41.2 ^c	+ 3.8	78 ^c	4†	2	17	40 ^c	3.20	+ 2.30	1.10	13.0	5	8	10	M. Hoffman, jr.	
Ellington.	Perkins.												0.97		0.28	11.0	5	R. E. Sheriff.	
Englewood.	Lawrence.	5,723	1										0.34		0.13	7.1	6	E. E. White.	
Eureka.	McPherson.	1,884	1	33.0		73	6	- 2	15	41	0.45		0.20	4.5	4	13	8	W. D. Griggs.	
Fairfax.	Gregory.	7															J. T. Murphy.		
Farmingdale.	Pennington.	3,000	14														A. E. Nicholls.		
Faulkton.	Faulk.	1,595	16	31.7	+ 2.2	75	6	0	15	46	1.33	+ 0.87		10.5	6	15	4	Miss Belle Talcott.	
Flandreau.	Moody.	1,565	20	34.2	+ 3.9	79	4	1	18	45	2.00	+ 1.16	1.30	8.5	4	9	9	G. A. Perley.	
Forestburg.	Sanborn.	1,231	19	33.0	+ 2.1	80	3†	0	15†	42	1.40	+ 0.82	0.80	14.0	5	15	5	M. K. Judy.	
Fort Meade.	Meade.	3,624	2	38.1	+ 3.7	77	3	6	13†	44	1.70	+ 1.12	0.80	11.7	4	6	4	Post Surgeon.	
Frederick.	Brown.	1,371	3										0.89		0.30	7.0	4	J. E. Jeffers.	
Gann Valley.	Buffalo.	12	34.8	- 2.8		80	6	5	14†	43	1.70	+ 1.32	0.60	17.0	5	8	12	V. P. Drifts.	
Greenmount.	Lawrence.	6,430	1			86	4	8	15†	49	1.60	+ 0.90	0.60	16.0	3	11	8	John H. Leitel.	
Greenwood.	Charles Mix.	15	38.9	+ 2.3									0.97		0.28	11.0	5	Mrs. Mary E. Seals.	
Hardy Ranger Station.	Lawrence.	6,600											0.20		0.61	6	14	7	U. S. Weather Bureau.
Hermosa.	Custer.	3,349	4	38.4		78	3	0	15	42	1.01		0.50	11.0	5	17	5	P. H. Moore.	
Hignmore.	Hyde.	1,890	16	31.8	- 1.7	79	6	- 5	17	44	0.71	+ 0.22	0.32	7.0	5	9	10	Geo. A. Karr.	
Hill City.	Miner.	5,061	1										0.94		0.26	10.6	8	J. J. Cox.	
Howard.	Hand.	1,504	18	34.4 ^c	+ 3.2	77 ^c	4	- 6	18	40 ^c	0.78		0.20	6.1	7	9	7	M. A. Shuster, jr.	
Howell.	Beadle.	8	31.6			81	6	0	15	49	0.58		0.20	5.5	4	18	5	U. S. Weather Bureau.	
Ipwich.	Edmunds.	1,306	29	31.7	+ 4.3	76	6	0	15	42	1.34	+ 0.78	0.76	12.6	8	18	10	J. B. Taylor.	
Kadoka.	Stanley.	1,530	12	30.0	+ 0.5	76	5	- 2	18	44	0.62	+ 0.23	0.30	5.5	4	18	5	Rev. D. S. Brown.	
Kennebec.	Lyman.	1,689	14	33.7 ^b	+ 1.4	84	6	1	17	59 ^b	1.30	+ 0.94	0.40	13.0	6	16	3	R. C. Van Horn.	
Kidder.	Marshall.	1,295	6	31.0		77	6	- 10	15	38	1.10		0.87	10.0	3	16	2	H. C. Schussler.	
Kimball.	Brule.	1,788	20																

TABLE 1.—Climatological data for November, 1909. District No. 6—Continued.

Stations	Counties.	Elevation, feet.	Length of record, yrs.	Temperature, in degrees Fahrenheit.					Precipitation, in inches.					Sky.	Prevailing wind direction.	Observers.					
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall unmelted.	Number of rainy days, 0.1 inch or more.	Number of clear days.	Number of partly cloudy days.	Number of cloudy days.			
<i>South Dakota—Cont'd.</i>																					
Selby.	Walworth.	1	32.2 ^b			70 ^b	3	4 ^b	21	37 ^b	1.28	+ 1.64	0.90	6.0	4	8	10	12	se.	Miss Gertrude Hall.	
Sioux Falls.	Minnehaha.	1,400	20	38.0	+ 6.4.	79	4	4	17	42	2.40	+ 0.02	1.50	13.0	6	14	1	15	nw.	J. H. Bechtold.	
Spearfish.	Lawrence.	3,647	40.0	+ 3.6	74	4	2	16	41	41	2.40	+ 0.30	5.0	3	7	6	17	w.	O. A. Martin.		
Stephan.	Hyde.	1,540	5	32.0		80	6	1	17	45	0.90		0.30	9.0	6	9	8	13	se.	Rev. A. Mattingly.	
Tama.	Meade.		1	32.2		77	6	—	6	16 ^a	50	1.04		0.35	10.2	8	6	17	7	se.	J. J. Daily.
Vale.	Meade.	2,765	2	33.7 ^b		76 ^b	3	—	7 ^a	16	52 ^a	0.43		0.10	7.2	7	13	7	10	e.	G. W. Shaw.
Van Metre.	Lynn.																			Thos. H. Hill.	
Vermillion.	Clay.	1,222	8	39.6		79	4	4	17	39	4.53		1.70	22.5	8	16	3	11	nw.	Prof. E. C. Perisho.	
Water's Ranch.	Lawrence.	4,000	1										0.90	0.30	11.1	4	10	6	14	nw.	Geo. Waters.
Watertown.	Codington.	1,735	14	32.6	+ 4.3	74	6	0	15	38	1.14	+ 0.52	0.80	6.0	3	5	5	13	s.	Robert Q. Wood.	
Wentworth.	Lake.	19	34.2	+ 4.9	79	4	2	18	41	4.49	+ 0.83	0.50	8.6	4	14	4	12	s.	R. C. Zimmerman.		
Wessington Springs.	Jerauld.	1,410	14	31.3	+ 2.2	78	6	5	15 ^a	41	1.03	+ 0.50	0.50	9.0	5	10	8	12	nw.	F. N. Dunham.	
White Lake.	Aurora.	1,646																		Mrs. G. A. Rogers.	
Yankton.	Yankton.	1,234	37	37.3	+ 3.8	81	4	9	18	43	2.50	+ 1.71	0.69	25.8	11	4	14	12	nw.	U.S. Weather Bureau.	
<i>Minnesota.</i>																					
Pipestone.	Pipestone.	1,710	10																	W. S. Campbell.	
<i>Colorado.</i>																					
Akron.	Washington.	4,650	7																	Ira M. Barnhouse.	
Alma.	Park.	10,238	12																	W. H. Powless.	
Arriba (near).	Lincoln.	5,239	3	37.7		76	6	3	17	47	0.95		0.60	9.0	4	13	9	8	sw.	C. S. Graves.	
Auldhurst.	Teller.	8,500																		Mrs. Alice A. Auld.	
Barker.	Boulder.	8,000	2																	F'n Colo. P. Co.	
Boreas.	Park.	11,489																		Frank Soper.	
Boulder.	Boulder.	5,347	13	43.8	+ 1.1	74	3	6	28	30	0.94		0.21	11.6	8	5	8	17	nw.	S. A. Giffin.	
Burlington.	Kit Carson.	4,160	5	42.4		78	3	9	16	44	1.16	+ 0.85	0.45	16.5	7	21	3	6	w.	C. Creglow.	
Cassels.	Park.	8,445																		Harriet M. Cassell.	
Castle Rock.	Douglas.	6,220	18	40.7	+ 4.9	74	6	—	6	16	47	0.60	+ 0.02	0.40	6.0	2	8	4	15	sw.	Chas. Hy. Ells.
Cheeseman.	Jefferson.	6,890	6	40.6		75	2	7	16	46	1.67		0.46	13.5	6	18	8	4	sw.	C. L. Adams.	
Cheyenne Wells.	Cheyenne.	4,279	16	40.6	+ 1.2	77	7	8	17	45	1.43	+ 0.94	0.66	11.5	4	15	6	9	s.	J. B. Robertson.	
Como.	Park.	9,785	10																	Edwin Pike.	
Cope.	Washington.	11	41.8	+ 3.8	79	4	6	17	49	1.68	+ 0.96	0.46	10.0	5	13	7	10	s.	A. A. Williams.		
Corona.	Grand.	11,660	2	22.2		44	3	—	5	16	20	1.96		0.60	30.8	11	11	7	12	w.	U. S. Weather Bureau.
Denver.	Denver.	5,272	37	42.7	+ 3.5	75	6	9	16	39	1.10	+ 0.58	0.47	13.5	7	9	12	9	s.	U. S. Weather Bureau.	
Edgewater.	Jefferson.	1	41.6			77	3	3	16	45	0.95		0.34	7.0	5	12	8	10	sw.	Dr. J. B. Fish.	
Estes Park Hatchery.	Larimer.	8,000																		Gaylord H. Thompson.	
Fort Collins.	do.	4,985	29	37.8	+ 2.6	76	3	—	3	16	46	0.79	+ 0.36	0.50	8.8	7	15	8	11	nw.	E'n. Colo. P. Co.
Fort Morgan.	Morgan.	4,314	19	37.9	+ 2.1	80	4†	—	4	16	57	0.81	+ 0.44	0.71	10.0	2	8	14	8	e.	P. A. Taft.
Frances.	Boulder.	9,300	4	35.4		62	3†	4	14	40	1.50		0.42	16.2	11	14	10	6	w.	Della M. Scott.	
Fry's Ranch.	Larimer.	7,500				71	3	—	2	15	46	1.42		0.81	7.5	6	13	10	7	w.	D. A. Barry.
Georgetown.	Clear Creek.	8,550	8																	Norman W. Fry.	
Greeley.	Weid.	4,649	18	39.9	+ 1.7	77	3†	3	16	52	0.74	+ 0.25	0.43	6.0	9	9	9	12	sw.	H. L. Corbett.	
Hartsel.	Park.	7,670																		Nelson Reynolds.	
Hawthorne.	Boulder.	6,000	1																	Emily Kletknecht.	
Holyoke (near).	Phillips.	3,745	13																	B. L. Cheesbro.	
Idaho Springs.	Clear Creek.	7,534	9	39.0	+ 4.6	67	5†	6	28	42	1.30		0.50	16.5	7	0	24	6	w.	E. E. T. Hazen.	
Kecta.	Weld.	4,986																		J. J. Willis.	
Kossler.	Boulder.	7,720	2																	E'n. Colo. P. Co.	
La Port.	Larimer.	5,053	18																	P. A. Taft.	
Le Roy (near).	Logan.	4,380	20	39.0	+ 1.7	75	4	5	16	42	0.91	+ 0.49	0.63	7.0	5	11	7	12	w.	Chas. Green.	
Longmont.	Boulder.	4,980	7	41.2		82	6	3	16	56	0.78		0.37	6.5	4	11	8	11	w.	Geo. W. Johnson.	
Long's Peak (near).	Larimer.	3,600	14	33.8	+ 2.3	64	3	—	4	13†	46	1.17	+ 1.14	0.90	19.0	7	16	9	5	nw.	Enos A. Mills.
Moraine.	do.	7,775	19	32.0	+ 1.6	64	3	3	16†	53	1.08	+ 0.43	0.40	14.0	5	8	12	10	w.	J. D. Stead.	
Platte Canyon.	Jefferson.	5,492	10																	Norman Steele.	
St. Cloud.	Larimer.	7,750																		Mrs. Phoebe A. Campton.	
Sedgwick.	Sedgwick.	3,573	1	39.8		81	3	—	4	17	58	0.79		0.35	12.0	4	9	14	7	se.	Dr. Edwin Lewis.
Sill Mine.	Clear Creek.	11,500		23.8		48	3†	—	5	14	31	2.41		0.82	31.0	9	14	4	12	sw.	Chas. F. Deininger.
Spicer (near).	Larimer.	8,700																		Frank W. Murphy.	
Waterdale.	do.	5,206	14	40.4		76	3	4	16	43	1.13	+ 0.63	0.80	10.5	6					P. H. Boothroyd.	
Westlake.	Boulder.	1																		G. E. Richardson.	
Wray.	Yuma.	3,512	15	41.2		85	3	5	16†	50	1.92	+ 1.53	1.00	7.0	9	10	11	9	s.	J. C. Tuomey.	
Yuma.	do.	4,138	18																	Geo. W. Custer.	
<i>Nebraska.</i>																					
Ainsworth.	Brown.	2,521	4	37.4		80	6	4	17	50	2.86				25.4	6	0	22	8	sw.	John M. Cotton.
Albion.	Boone.	1,747																		F. A. Pittenger.	
Alliance.	Boxbutte.	3,068	14																	Agent, C. B. & Q. R. R.	
Alma.	Harlan.	1,939	12	42.4	+ 2.3	82	3	1	18	47	2.57		0.16	0.50	5.0	6	11	11	8	n.	W. A. Sharpnack.
Anoka.	Boyd.	3		33.8		84	4	0	18	56	1.30		0.50	16.0	5	6	18	6	nw.	W. Whittle.	
Arcadia.	Valley.	2,188																		J. L. von Mansfeld.	
Ashland.	Saunders.	1,100	19	43.4	+ 4.3	78	4†	10	18	37	7.66	+ 6.63	2.36	7.5	11	11	12	7	sw.	A. S. Owen.	
Ashton.	Sherman.	2,081		36.2		83	4	0	17	48	1.21		1.00	3.0	5	15	9	6	nw.	Fred Rein.	
Atkinson.	Holt.	2,108	4	36.2		82	5	14	18	41	0.97	+ 7.56	3.64	4.0	10	11	1	18	s.	C. J. Wilson.	
Auburn.	Nemaha.	1,051	17	47.0	+ 6.2	82	5	14	18	41	0.97	+ 1.66	0.40	1.20	4	13	5	10	nw.	J. R. Huffman.	
Aurora.	Hamilton.	1,792		40.6	+ 2.3	76	3†	5	17	47	3.31		0.95	6.0	6	14	10				

DISTRICT NO. 6. CLIMATOLOGICAL SUMMARY.

NOVEMBER, 1909

TABLE 1.—Climatological data for November, 1909. District No. 6—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, yrs.	Temperature, in degrees Fahrenheit.						Precipitation, in inches.						Sky.	Prevailing wind direction.	Observers.	
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall unmeasured.	Number of rainy days, 1/1 inch or more.	Number of clear days.	Number of partly cloudy days.	Number of cloudy days.	
Nebraska—Cont'd.																			
Dawson.....	Richardson	945	13	46.9	+ 4.0	81	5	15	18	9.49	+ 7.89	3.33	1.5	11	13	5	12	nw.	Mrs. E. I. Atkinson.
Dubois.....	Pawnee.....	1,074								9.98	4.00	11	9	4	17	s.	O. M. Backus.		
Duff.....	Rock.....																	Dewitt Eager.	
Edgar.....	Clay.....	1,722								2.98	1.18	5.5	6	9	11	10		G. W. Ferree.	
Ellis.....	Gage.....	1,430								7.60		7						D. J. Wood.	
Elm Creek.....	Buffalo.....	2,268								1.85	1.04	3						E. L. Sutton.	
Elste.....	Perkins.....	3,382								0.87	0.30	14.5	4					J. L. Brittain.	
Enders Lake.....	Brown.....		1	41.3		85	7	2	15	64	0.30	0.15	3	9	6	15	sw.	C. D. Langley.	
Endicott.....	Jefferson.....	1,288								2.50	1.20	17	1	12			e.	Agent, C. B. & Q. R. R.	
Ewing.....	Holt.....	1,888	3	37.4	+ 6.6	83	6	3	17	49	1.25	0.40	12.5	6				G. H. Benson.	
Fairbury.....	Jefferson.....	1,316	14	46.6	+ 4.4	84	4	10	17	46	6.73	+ 5.73	3.25	2.0	9	13	7	10	no.
Fairmont.....	Fillmore.....	1,641	15	42.2	+ 4.4	79	5	11	17	40	4.36	+ 3.44	1.56	4.2	7	15	1	10	w.
Fort Robinson.....	Dawes.....	3,764	27	37.3	+ 1.9	77	5	- 3	16	49	1.02	+ 0.62	0.55	10.2	5	14	6	10	Post Surgeon.
Franklin.....	Franklin.....	1,820	15	41.4	+ 2.7	80	3	3	18	41	3.90	+ 3.16	1.75	6.0	5	20	1	9	ne.
Fremont.....	Dodge.....	1,203	27	42.0	+ 5.3	78	5	8	18	40	7.01	+ 5.89	2.10		10	11	9	10	D. T. Shoemaker.
Fulterton.....	Nance.....	1,629	3	40.0 ^a		86 ^a	6	- 3 ^a	17	51 ^a	4.03		0.80	15.0	10	11	10	9	Ernest Hahn.
Geneva.....	Fillmore.....	1,633	17	43.0	+ 4.5	80	4	14	17 ^b	42	4.65	+ 3.64	1.69	5.0	9	11	9	11	nw.
Genoa.....	Nance.....	1,584	34	40.2	+ 4.9	78	4	1	18	43	1.79	+ 1.00	0.90	13.0	10	9	10	11	F. W. Crumb.
Gordan.....	Sheridan.....	3,550	1	34.8 ^d		79 ^d	5 ^d	- 5 ^d	17	61 ^d	1.75		1.00	18.0	5	20	1	9	Agent, C. B. & Q. R. R.
Gosper.....	Gosper.....																	G. F. Parsons.	
Gothenburg.....	Dawson.....	2,557	15	40.3	+ 2.0	83	3 ^c	- 2	18	50	2.27	+ 1.47	0.84	16.4	4	16	4	10	W. J. Bartholomew.
Grand Island.....	Hall.....	1,860	17	41.2	+ 3.8	78	3	9	18	40	0.97	+ 0.17	0.70		6	10	7	13	E. A. Barnes.
Grant.....	Perkins.....	3,405	5	38.5 ^a		80 ^a	3	0 ^a	16	49 ^a								Cyrus Carver.	
Greeley.....	Greeley.....	2,021	2	40.5		79	4	2	14	46	2.47		1.00	20.8	7	9	12	9	W. E. Morgan.
Guderlock.....	Webster.....	1,646									4.07		0.90	7.0	5	8	11	11	J. S. Marsh.
Haigler.....	Dundy.....	3,258									2.05							Agent, C. B. & Q. R. R.	
Halsey ^b	Thomas.....	2,695	6	40.8		82	4	3	17	51	1.19		0.49	15.0	6	5	18	7	U. S. Forest Service.
Hartington.....	Cedar.....	1,309	18	37.9	+ 4.0	79	3	5	18	46	2.70	+ 1.56	0.98	15.5	7	7	9	14	D. E. Ewing.
Harvard.....	Clay.....	1,812	19	39.4	+ 2.8	73	4	9	18	43	2.30	+ 1.57	0.78		7	11	9	10	Dr. J. T. Fleming.
Hastings.....	Adams.....	1,932	16	40.4	+ 1.9	78	4	1	17	35	3.32	+ 2.55	1.22	11.0	5	20	1	9	Agent, C. B. & Q. R. R.
Hayes Center.....	Hayes.....	1,532	5	39.6		81	4	5	16	53	3.50		1.10	20.0	4	17	7	6	C. A. Ready.
Hay Springs.....	Hebron.....	3,821	22	35.7	+ 2.5	78	4	- 3	16	55	2.05	+ 1.42	0.60	18.0	6	7	13	10	A. Kadlecov.
Hendley.....	Thayer.....	1,458	24	43.6	+ 4.4	80	3	11	14	42	8.47	+ 7.19	4.00	T	6			C. M. Easton.	
Holdrege.....	Furnas.....	2,231									2.60		0.65	10.0	6	6			F. A. Jones.
Hooper ^b	Phelps.....	2,324	15	40.8	+ 2.7	88	3	8	17	52	2.58	+ 1.89	0.60	15.0	5	18	0	12	Agent, C. B. & Q. R. R.
Hooper ^b	Dodge.....	1,228	12	41.4	+ 3.9	79	3 ^c	8	18	39	6.43	+ 5.04	1.99	11.5	11	10	13	T. W. Lyman.	
Imperial.....	Red Willow.....	3,278	20	39.6	+ 2.0	80	3	2	18	50	2.46	+ 1.86	0.92	17.0	4	9	9	12	Robt. Malcolm.
Kearney.....	Buffalo.....	2,146	17	42.2 ^d	+ 3.5	83 ^d	3	- 1	17	48 ^d	1.72	+ 1.08	0.66	12.2					N. C. Dunlap.
Kimball.....	Kimball.....	4,697	21	37.2	+ 1.3	75	3	3	16	45	0.45	+ 0.03	4.45	2	14	9	7	F. J. Bellows.	
Kirkwood.....	Rock.....	14	38.0 ^a	+ 3.6	83 ^a	4	0 ^a	17	46 ^a	1.90	+ 1.26	1.10	19.0	4	15	6	9	Mrs. C. Arter.	
Kowanda.....	Denell.....										0.40		0.20					Geo. W. Hulse.	
Leavitt ^b	Dodge.....	1,228																W. T. Scilley.	
Lexington.....	Dawson.....	2,385	20	40.6	+ 3.4	81	5	0	18	48	1.15	+ 0.57	0.58	4	20	1	9	ne.	
Lincoln.....	Lancaster.....	1,189	24	44.2	+ 6.2	80	4	15	18	39	7.14	+ 6.29	3.29	5.9	13	7	5	18	U. S. Weather Bureau.
Lodgepole.....	Cheyenne.....	3,820		40.2	+ 3.3	78	4	1	16	46	1.58	+ 0.96	0.70	12.0	3	16	4	10	nw.
Loup.....	Sherman.....	2,087									1.50		1.20	15.0	2	16	6	8	C. H. Cass.
Loyal.....	Custer.....										2.03	+ 1.34	0.80	20.0	5	20	4	6	S. W. Lightner.
Lynch.....	Boyd.....										2.02	+ 1.38	0.59	14.0	4	15	3	12	C. G. Cogilizer.
McCook.....	Red Willow.....	2,506	9	40.0	+ 2.3	85	3	- 1	18	54	3.97		1.15		7			L. L. Slagle.	
McCook Junction.....	York.....	1,575																Dr. F. A. Long.	
Madison.....	Madison.....	1,585	15	40.1	+ 3.9	75	4 ^c	4	18	39	2.80	+ 1.87	0.90	15.0	7	13	7	10	John Ellis.
Marquette.....	Hamilton.....	1,830									1.83		0.66	12.6	9				J. A. Amberry.
Mason City.....	Custer.....	2,257									1.30								Joel Hull.
Minden.....	Kearney.....	2,189	26	40.2	+ 3.0	78	3 ^c	3	17	39	2.34	+ 1.38	0.60	15.2	9	11	8	11	U. S. Reclamation Service.
Mitchell.....	Scottsbluff.....	1	37.5			77	6	- 10	16	54	0.69		0.43	6.9	5	10	12	8	Wm. Webster.
Monroe.....	Platte.....	1,525									2.69		0.89	13.5	8	11	10	9	Agent, C. B. & Q. R. R.
Nebraska City.....	Otoe.....	941	27	46.6	+ 7.8	80	5	15	17 ^c	42	6.79	+ 5.70	4.00	3.0	8	12	5	13	Dr. F. H. Salter.
Norfolk.....	Madison.....	1,532	24	39.6	+ 5.3	83	4	0	18	49	2.74	+ 1.98	0.62	13.0	8	18	3	9	W. G. Rood.
North Loup.....	Valley.....	1,961	21	39.6	+ 3.4	81	4	1	18	51	1.26	+ 0.68	14.0	4	15	7	8	U. S. Weather Bureau.	
North Platte.....	Lincoln.....	2,841	35	38.6	+ 3.5	80	4	2	17	49	2.24	+ 1.84	1.18	17.9	6	13	6	11	G. S. Clingman.
Oakdale.....	Antelope.....	1,722	21	36.8	+ 2.8	74	3 ^c	0	18	40	2.02	+ 1.33	0.70	13.2	8	10	12	8	Agent, C. B. & Q. R. R.
Odell.....	Gage.....	1,278									5.55		3.00	1.0	7	10	5	15	U. S. Weather Bureau.
Omaha.....	Douglas.....	1,103	39	43.9	+ 6.2	77	5	14	17	32	6.24	+ 5.18	2.53	5.2	13	7	10	13	James McGeachin.
Ordn.....	Valley.....	2,082									1.36	+ 0.74	0.71		3	6	16	8	Thos. Coles.
Orleans.....	Hartian.....	1,993									2.28		0.88	7.0	5				F. A. Barton.
Osceola.....	Polk.....	1,644		40.8 ^a		74 ^a	4	1	17	48 ^a	1.92		1.22	2.0	3			John Ruppel.	
Palmyra ^b	Otoe.....	1,142	11	44.5	+ 4.7	84	5	16	17	51	7.84	+ 6.34	5.85	1.5	8	13	11	J. L. Ferguson.	
Pawnee City.....	Pawnee.....	1,175	6	46.4		83	5	11	18	46	8.35		3.87	2.0	9	16	4	10	Agent, C. B. & Q. R. R.
Plymouth.....	Jefferson.....	1,419	5	43.9		81	4	15	17	42	6.13		2.70		8	7	12	11	A. B. McCoskey.
Purdum.....	Blaine.....	8	38.9		81	4	- 2	17	52	1.99	</td								

DISTRICT NO. 6. CLIMATOLOGICAL SUMMARY.

TABLE 1.—Climatological data for November, 1909. District No. 6—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, yrs.	Temperature, in degrees Fahrenheit.				Precipitation, in inches.				Sky.				Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Greatest in 24 hours.	Total snowfall unmeted.	Number of rainy days.	Number of partly cloudy days.	Number of cloudy days.
Nebraska—Cont'd.																
Wauneta.	Chase.															C. D. Fuller.
Weepingwater.	Cass.	1,080	3	43.7		81	5	12	18	45	9.20	2.84	18.0	5	16	nw.
Westpoint.	Cuming.	1,313	13	39.6	+ 0.9	82	3	1	18	46	7.82	+ 1.74	8.1	10	7	s.
Wilber.	Saline.	1,325													J. C. Elliott.	
Wisma.	Cuming.	1,380													Agent, C. B. & Q. R. R.	
Woodlawn.	Lancaster.	1,186													Aoff & Deily.	
York.	York.	1,606	17	42.2	+ 3.9	81	4	7	18	44	3.84	+ 3.00	1.04	5.8	10	nw.
Iowa.															H. C. Kendall.	
Afton.	Union.	1,212	14	45.0	+ 8.2	76	5	13	17	32	5.20	+ 3.97	1.83	3.5	10	sw.
Allerton.	Wayne.	1,513	17	46.8	+ 6.2	80	5	14	18	40					Mrs. Geo. Shriver.	
Altas.	Buena Vista.	6	37.8			74	4	4	17	37	6.13				David E. Hadden.	
Alton.	Sioux.	1,305	3	37.6		72	4	1	18	36	3.94				W. J. Minard.	
Atlantic.	Cass.	1,184	17	42.9	+ 7.5	78	5	10	18	37	8.66	+ 7.68	3.44	5.0	12	se.
Audubon.	Audubon.	1,301	15	42.1	+ 6.9	75	5	10	17	33	8.57	+ 7.23	3.77	9.5	12	nw.
Bedford.	Taylor.	8	45.0			77	5	10	18	38	4.21		0.86	1.2	11	s.
Chariton.	Lucas.	1,042	13	46.0	+ 7.3	81	5	12	18	38	4.74	+ 3.44	1.30	1.0	8	15
Clarinda.	Page.	1,009	18	44.3	+ 6.5	79	5	13	18	42	4.58	+ 4.58	1.95	5.0	12	se.
Cornings.	Adams.	1,117	16	44.1	+ 6.9	74	5	12	17	38	5.62	+ 4.42	2.24	4.0	10	9
Corydon.	Wayne.	1,101	15	47.9	+ 9.2	82	5	13	18	38	4.36	+ 2.01	1.01	T.	9	12
Creston.	Union.	1,312	3	43.2		79	5	12	18	40	4.92		1.70	1.0	10	2
Cumberland.	Cass.	9													Edgar Stovall.	
Denison.	Crawford.	1,180	13	40.1	+ 4.5	77	5	5	18	42	8.13	+ 0.75	2.74	6.1	11	sw.
Elliot.	Montgomery.	3	43.2			78	5	12	18	39	7.78		3.30	6.0	11	s.
Hancock.	Pottawattamie.	1,113	2	43.0		78	6	10	18	36	8.38		3.00	7.0	8	18
Harlan.	Shelby.	1,192	9	41.4		78	5	6	18	39	8.95		4.08	8.0	11	nw.
Hopeville.	Clarke.	17	45.8	+ 9.1		79	5	13	18	35	4.60	+ 3.51	1.39	1.0	12	s.
Inwood.	Lyon.	1,474	4	35.6		77	5	3	23	37	3.08		1.38	12	16	5
Lemoni.	Decatur.	47.0				75	5	13	18	33	3.66		1.01	1.0	14	13
Larrabee.	Cherokee.	1,266	17	37.0	+ 4.1	71	6	1*	18	35	5.92	+ 4.90	1.40	24.0	13	8
Le Mars.	Plymouth.	1,224	12	38.4	+ 3.9	70	6	5	18	37	4.35	+ 3.12	1.12	13.0	9	12
Lenox.	Taylor.	1,250	13	45.0	+ 7.1	75	5	12	18	31	4.42	+ 3.20	1.40	2.5	11	5
Leon.	Decatur.	1,120	6	47.8		76	5	14	18	38	5.30		0.95	1.5	9	7
Little Sioux.	Harrison.	4	41.4			79	5	3	17	41	5.93		1.70	7.5	9	17
Logan.	Logan.	928	42	42.2	+ 6.3	78	5	9	17	42	8.29	+ 7.04	2.34	T.	10	10
Mt. Ayr.	Ringgold.	1,236	15	46.8	+ 7.9	79	5	14	17	36	4.29	+ 2.93	0.91	1.8	15	6
Odebolts.	Sac.	1,356	10	40.3	+ 3.8	76	5	18	35	37	7.18	+ 6.04	2.00	16.5	9	11
Onawa.	Monona.	1,051	8	41.6		76	3†	10	18	37	5.34		1.25	12.5	12	4
Pacific Junction.	Mills.	960	9	42.4		76	4	11	18	41	9.74		3.04	4.1	11	s.
Rock Rapids.	Lyon.	1,358	9	37.8		71	6	9	17	42	2.60		20.0	4		
Sheldon.	O'Brien.	1,422	8	37.8		76	6	0	18	38	5.05		1.30	18.5	9	11
Sibley.	Osceola.	1,212	15	34.8	+ 2.8	75	4†	24	17	40	4.02	+ 3.03	1.62	9.2	10	nw.
Sioux Center.	Sioux.	9	36.2			70	6	4	17	30	2.47		1.00	9.5	8	11
Sioux City.	Woodbury.	1,135	20	39.3	+ 5.0	75	4	10	18	34	3.02	+ 2.05	1.33	12.1	15	15
Thurman.	Fremont.	11	44.0	+ 5.4		77	6	10	18	39	9.03	+ 3.96	4.0	12	7	16
Washta.	Cherokee.	1,157	10	37.7		77	4	- 4	18	45	5.18	+ 4.21	2.18	10.5	10	8
Woodburn.	Clarke.	961	9	47.2		80	5	11	18	44	4.66		1.30	3.0	11	5
Kansas.															C. B. McDonough.	
Abilene.	Dickinson.	1,157	14												J. H. Sherman.	
Agricultural College.	Riley.	1,100	51	49.8	+ 8.7	87	4	18	17	52	7.98	+ 4.44	2.88	6	9	12
Alton.	Osborne.	1,651	7	45.4		83	4	14	17	47	2.36		3.10	0.0	10	6
Atchison.	Atchison.	973	18	50.0	+ 8.2	82	5	19	17	32	4.40	+ 3.13	1.80	T.	8	13
Baker.	Brown.	1,182	9	46.5		80	5	16	18	38	7.75		1.90	T.	9	8
Beloit.	Mitchell.	1,333	14			84	5	8	17	58	2.47		0.89	12.0	6	18
Blakeman.	Rawlins.	2,894	1	41.4											E. A. Bastien.	
Blue Rapids.	Marshall.	1,105	3												W. H. Houghton.	
Centralia.	Dickinson.	1,256		46.6		80	3†	15	17	38	8.51		2.90	0.0	8	15
Chapman.	Nemaha.	1,123	5	48.0		87	4	19	17	50	7.02		2.60	T.	8	16
Clay Center.	Clay.	1,203	8	47.5		88	4	10	16	51	6.56		2.60	T.	8	19
Colby.	Thomas.	3,138	18	42.9	+ 3.7	85	2	8	16	53	2.26	+ 1.75	0.76	8.5	5	10
Concordia.	Cloud.	1,398	25												R. M. Hazen.	
Densmore.	Norton.	2,200		44.0		86	3	9	18	40	2.70		1.00	8.0	7	16
Dresden.	Decatur.	2,731	15	43.9	+ 2.2	83	5	8	16	45	2.56	+ 1.98	1.80	8.0	12	sw.
Ellsworth.	Ellsworth.	1,557	5	46.9		86	4	15	16	50	5.30		2.00	T.	8	8
Enterprise.	Dickinson.	1,144	7	49.4		90	3	19	17	57	6.72		2.81	T.	7	14
Eskridge.	Wabaunsee.	1,412	3	49.7		85	3†	19	17	36	3.39		3.05	0.0	8	13
Farnsworth.	Lane.	2,850	8	45.8		84	3†	11	16	52	3.25		1.55	1.8	8	8
Ft. Scott.	Bourbon.	857	13	52.2	+ 6.1	81	4	19	18	39	4.96	+ 2.46	2.15	0.0	9	12
Frankfort.	Marshall.	1,146	15	47.6	+ 5.8	87	3	16	17	55	9.58	+ 8.37	4.83	0.2	8	9
Garnett.	Anderson.	950	3			81	4	22			1.98		0.93	0.0	6	10
Goodland.	Sherman.	3,687	3												G. L. Calvert.	
Gove.	Gove.	2,750	20	48.6	+ 8.8	88	5	15	15	29	2.99	+ 2.40	1.00	5.0	7	7
Hanover.	Washington.	1,225	6	47.2		85	4	15	17	46	6.19		4.10	0.6	8	14
Harrison.	Jewell.	1,804	8	43.7		81	4	14	17	45	4.46		1.55	1.2	11	7
Hays.	Ellis.	2,000	21	45.7	+ 5.3	82	3†	14	16	47	4.65		2.83	1.13	3.0	8
Hill City.	Graham.	2,134	1												J. R. Lynch.	
Horton.	Brown.	1,188	20	47.8	+ 6.4	81	4	18	17	34	5.51	+ 4.29	1.82	T.	8	7
Hoxie.	Sheridan.	2,700	12	42.3		82	4	12	16	47	2.59		0.90	7.0	7	18
Jewell.	Jewell.	1,540	4	44.3		84	4	17	16	46	5.12		1.80	2.0	2	16
Lawrence.	Douglas.	874	12	50.8	+ 9.2	75	9	22	17	34	4.79	+ 2.96	2.34	0.0	10	9
Lebanon.	Smith.	1,812	11	44.0		79	4	12	16	30	4.99	+ 4.10	1.73	1.0	10	7
Lindsborg.	McPherson.	1,333	3												J. R. Mort.	
Manhattan.	Riley.	1,014	19	48.0	+ 5.8	88	5	20	17	52	7.97	+ 6.76	2.98	T.	9	6
Mankato.	Jewell.	1,754	45.8			83	4	14	16	38	4.03		1.08	2.2	11	s.
Minneapolis.	Ottawa.	1,259	19	46.4	+ 5.6	83	4†	16	18	45	6.37	+ 5.61	2.61	0.5	10	13
Moran.	Allen.	1,098	13	53.4</td												

DISTRICT NO. 6. CLIMATOLOGICAL SUMMARY.

NOVEMBER, 1909

TABLE 1.—Climatological data for November, 1909. District No. 6—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, yrs.	Temperature, in degrees Fahrenheit.				Precipitation, in inches.				Sky.	Prevailing wind direction.	Observers.						
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall unmeted.	Number rainy days. 0.01 inch or more.	Number of clear days.	Number of partly cloudy days.	Number of cloudy days.		
<i>Kansas—Cont'd.</i>																				
Scott.....	2,971	3	47.4			84	47	15	16	51	3.67		0.81	3.0	6	15	7	8	s.	
Topeka.....	997	23	49.8	+ 8.1		82	22	18	36	59.8	+ 4.72	3.83	T.	9	9	7	14	s.	J. B. Lougahan, U. S. Weather Bureau.	
Valley Falls.....	913	10	49.4	+ 8.3		82	37	19	17	42	5.36	+ 3.82	2.20	T.	9	11	6	13	s.	Miss Nettie Maxwell.
Vinland.....	880		50.2			82	3	16	18	41	2.61		1.05	0.0	9	9	7	14	sw.	A. Schick.
Wakeeney.....	2,456	5	45.9			81	3	14	16	46	3.74		0.83	2.0	9	19	2	9	s.	A. S. Peacock.
Wallace.....	3,303	39	42.0			84	3	6	17	54	2.55	+ 2.08	1.01	7.0	4	3	15	12	sw.	M. T. Griggs.
Wamego.....	1,002	16									9.08	+ 7.88	6.10		8	12	5	13	sw.	M. L. Stone.
<i>Missouri.</i>																				
Albany.....		2																		W. E. Elder.
Amoret.....	850		54.2			83	4	20	18	43	2.47		1.00	0.0	8	13	2	15	s.	C. L. Glassmire.
Appleton City.....	853	18	55.6	+ 10.8		85	5	21	18	39	5.15	+ 2.85	2.15	0.0	6	13	9	8	s.	T. C. Brown.
Arlington.....	695	23																		P. W. Andres.
Arthur.....	767	16	55.5	+ 11.8		86	6	19	18	47	3.26	+ 1.22	1.30	0.0	5	10	15	5	sw.	J. T. Armstrong.
Avalon.....																				F. G. Ashbaugh.
Bagnell.....	594	14																		W. S. Brockman.
Bethany.....	881	19																		W. H. Skinner.
Bolivar.....	1,070	21	57.4	+ 11.4		85	4	17	18	49	6.82	+ 4.15	3.44	0.0	9	9	19	2	sw.	E. Waltz.
Boonville.....	600	33																		C. Randecker.
Brunswick.....	631	30	49.8	+ 8.4		81	5	18	18	44	3.83	+ 1.89	1.60	0.0	9	10	3	17	sc.	Louis Boncke.
Clinton.....	800	7	54.4			87	3	20	18		3.95		1.13	0.0	12	14	10	6	s.	Dr. G. W. Menets.
Columbia.....	784	18	52.6	+ 10.2		80	5	18	37	5.36	+ 3.05	2.30	T.	12	11	7	12	s.	U. S. Weather Bureau.	
Conception §.....	982	24	48.1	+ 7.5		79	4	15	18	36	3.63	+ 2.34	1.40	T.	7	8	7	15	s.	Fr. Adhelm Hess.
Darksville.....	828	18	52.6	+ 9.7		81	5	17	18	35	2.60	+ 0.92	0.85	0.0	6	14	4	12	s.	W. H. Broadelus.
El Dorado Springs.....	750	3	55.7 ^a			85 ^a	4	18 ^a	18	43 ^a	4.70 ^a		1.33 ^a	0.0 ^a	6 ^a	11 ^a	8 ^a	10 ^a	sw.	Samuel Graham.
Fairport.....	920	15																		J. W. Lincoln.
Fayette ¶.....	725	26	50.9	+ 8.4		80	5	16	18	37	2.36	+ 0.26	1.02	0.0	6	11 ^c	2 ^c	14 ^c	sw.	T. Berry Smith.
Fulton.....	818	18	52.4	+ 7.9		82	5	19	18	42	6.07	+ 3.91	2.02	0.0	9	7	15	8	s.	Mrs. Ruth McKinney.
Gallatin.....	803	16																		Dr. W. P. Young.
Glasgow.....	818	30																		J. D. Shaughnessy.
Grant City.....	1,130	17	48.0			80	5	14	18	36	4.00	+ 0.66	1.14	0.0	10	12	1	17	s.	W. H. Campbell.
Harrisonville.....	912	37	49.7	+ 7.9		79	5	18	18	2.49	+ 0.49	1.08	0.0	11	5	5	20	sw.	A. J. Sharp.	
Hazelhurst.....																				W. H. Baker.
Hermann.....	432	35																		C. T. Maushund.
Houston.....	1,280	17	54.7	+ 9.2		82	3	16	18	41	2.15	+ 1.02	1.40	0.0	6	5	20	5	se.	E. Dempsey.
Huntsville.....	790	6																		F. H. Hammatt.
Jefferson City.....	628	27	51.0	+ 7.0		81	7	19	18	46	7.06	+ 4.91	2.90	0.0	9	17	2	11	s.	Miss Emma Swift.
Kansas City.....	963	21	52.0	+ 10.5		80	3	22	17	30	2.86	+ 1.01	1.30	T.	15	7	8	15	s.	U. S. Weather Bureau.
Kidder.....	1,017	16	50.6	+ 9.7		80	6	17	18	52 ^b	3.69	+ 2.01	1.20	0.0	11	14	5	11	sw.	J. F. Sharp.
LaMonte.....	863	21	52.9			80	4	17	18	40	2.96	+ 0.99	0.92	T.	10	10	10	10	sw.	J. R. Wade.
Lebanon.....	1,265	20	55.6	+ 10.0		80	37	18	18	40	4.86	+ 2.32	2.71	0.0	4	16	7	7	s.	M. W. Serl.
Lexington.....	813	27	50.4	+ 7.2		80	5	19	18	35	2.72	+ 0.76	1.05	T.	8	14	2	14	sw.	J. W. Keithley.
Liberty.....	864	21	50.7 ^b	+ 8.3		82 ^b	5	18 ^b	17	34 ^b	3.19 ^b	+ 1.48	1.30 ^b	T.	6	14 ^b	4	10 ^b	sw.	J. W. Kyle.
Lockwood.....	1,088	14	57.4			82	4	22	17	38	7.53	+ 5.68	3.17	0.0	6	15	8	7	se.	C. S. Crow.
Marshall.....	779	18	51.4	+ 9.0		81	5	17	18	33	4.27	+ 2.16	1.10	0.0	10	15	7	8	sw.	W. H. Black.
Marshfield.....	1,492																			Dr. J. P. Keller.
Maryville.....	1,160	19	44.8	+ 6.3		79	5	14	18	47	4.63	+ 3.31	1.48	2.0	10	11	3	16	s.	J. R. Brink.
Mt. Vernon.....	1,480	33	56.4	+ 9.7		84	4	20	18	40	8.49	+ 5.73	5.50	0.0	9	12	15	3	se.	Dr. O. H. Brown.
Nevada.....	869	15																		C. Jewell.
New Palestine.....																				A. I. Zeitgle.
Oregon.....	795	17	54.9	+ 9.2		81	5	20	17	33	3.19	+ 1.32	1.24	T.	4	16	5	9	sw.	Tom Curry.
Osceola.....	1,113	54	46.6	+ 6.9		76	5	13	18	35	4.41	+ 2.75	2.00	T.	5	14	3	13	nw.	W. E. Matthews.
Platte Parkville.....	738	9																		Prof. A. D. Wolfe.
Rolla.....	1,092	28	55.6			83	3	19	17 ^b	37	5.28	+ 2.78	2.93	T.	8	13	8	9	sw.	Prof. P. J. Wilkins.
St. Charles.....	614	31	54.6	+ 10.2		81	5	20	18	38	5.21	+ 2.44	2.73	0.0	4	11	7	12	s.	L. C. Saeger.
Buchanan.....	825	37	50.0			82	3	19	18	36	5.04	+ 3.36	1.54	T.	9	14	3	13	se.	Grant Forbes.
St. Louis.....	567	39	54.5	+ 11.1		78	7	24	18	34	4.36	+ 1.48	2.00	0.0	9	10	7	13	s.	U. S. Weather Bureau.
Sublett.....	1,000	29	49.0	+ 8.8		79	5	15	16	36	2.00	+ 0.17	2.00	0.0	1	15	8	8	sw.	Erres Spriggs.
Adair.....	812	14	49.2	+ 7.6		73	5	18	18	81	2.55	+ 0.82	0.60	T.	10	11	2	17	se.	J. H. Fleisher.
Trenton.....	812	14	49.2	+ 7.6		73	5	18	18	33	4.00	+ 2.29	1.10	T.	9	11	5	14	s.	Geo. W. Davis.
Unionville.....	1,072	16	47.8	+ 8.5		79	5	14	18	33	5.57	+ 3.00	1.35	0.0	8	15	8	7	sw.	Prof. S. F. Prince.
Versailles.....	1,021	8																		John H. Frick.
Warrensburg.....	883	30	54.2	+ 10.1		80	4	19	18	32	1.63	- 0.12	0.59	T.	9	3	14	13	sw.	Dr. J. R. Smith.
Warrenton.....	865	19	51.8	+ 9.3		80	47	18	18	45	7.28	+ 4.73	2.15	0.0	10	12	11	7	s.	Mrs. S. A. Jackson.
Warsaw.....	700	5	55.2			87	4	18	18	49	5.29		1.14	T.	10	12	11	7	s.	
Wheatland.....	920	17																		

* Precipitation included in that of the next measurement.

** Temperature extremes are from observed readings of the dry-bulb; means are computed from observed readings.

† Also on other dates.

§ Data are from standard instruments not supplied by the U. S. Weather Bureau.

|| Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

Estimate by observer.

¶ Precipitation for the 24 hours ending on the morning when it is measured.

T. Precipitation is less than 0.01 inch rain or melted snow.

a, b, c, etc., indicate, respectively, 1, 2, 3, etc., days missing from the record.

TABLE 2.—*Daily precipitation for November, 1909. District No. 6, Missouri Valley.*

DISTRICT No. 6. CLIMATOLOGICAL SUMMARY.

NOVEMBER, 1909

TABLE 2.—*Daily precipitation for November, 1909. District No. 6—Continued.*

NOVEMBER, 1909.

DISTRICT No. 6. CLIMATOLOGICAL SUMMARY.

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TABLE 2.—*Daily precipitation for November, 1909. District No. 6—Continued.*

Stations.	River basins.	Day of month.																													Total.					
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31				
<i>North Dakota—Cont'd.</i>																																				
New England.....	Cannon Ball.....										T.	.05	.30	.40	.10						T.	.05											.90			
New Salem.....	Heart.....									T.	.10	.20									T.	.12											.42			
Orange.....	Cannon Ball.....											.10	.50																					.60		
Palermo.....	Missouri.....												T.																						.10	
Steels.....																																			.15	
Swartwood.....	Grand.....											.06	.20	.14	.04	.02						T.	.02	.03										.51		
Washburn.....	Missouri.....												T.	T.	.08	.06	T.					T.	T.										.11			
Williston.....																																			.20	
Wishek.....																																			.20	
<i>South Dakota.</i>																																				
Aberdeen|||	James.....																																			1.18
Academy.....	Missouri.....																																			1.62
Alexandria.....	James.....																																			1.92
Andover.....																																				
Ardmore|||	Cheyenne.....																																			1.00
Armour.....	Missouri.....																																			1.75
Ashcroft.....	Little Missouri.....																																			0.65
Belle Fourche.....	Cheyenne.....																																			0.65
Bowdle.....	Missouri.....																																			1.05
Brookings.....	Big Sioux.....																																			1.65
Burke.....	Missouri.....																																			1.05
Canton.....	Big Sioux.....																																			2.39
Cascade Springs.....	Cheyenne.....																																			1.50
Castlewood.....	Big Sioux.....																																			0.73
Centerville.....	Missouri.....																																			2.81
Chamberlain.....																																				1.21
Clark.....	James.....																																			1.25
Clear Lake.....	Big Sioux.....																																			
Clifton.....	Missouri.....																																			
Cottonwood.....																																				
Davidson.....	Cheyenne.....																																			
Deadwood.....																																				
De Smet.....	James.....																																			
Dowling.....	Cheyenne.....																																			
Dumont.....																																				
Elk Point.....	Missouri.....																																			
Ellington.....																																				
Englewood.....	Cheyenne.....																																			
Eureka.....	Missouri.....																																			
Fairfax.....																																				
Farmingdale.....	Cheyenne.....																																			
Faulkton.....	James.....																																			
Flandreau.....	Big Sioux.....																																			
Forrestburg.....	James.....																																			
Fort Meade.....	Cheyenne.....																																			
Frederick.....	James.....																																			
Gann Valley.....	Missouri.....																																			
Greenmont.....	Cheyenne.....																																			
Greenwood.....	Missouri.....																																			
Hardy Ranger Station.....	Cheyenne.....																																			
Hermosa.....																																				
Highmore.....	Missouri.....																																			
Hill City.....	Cheyenne.....																																			
Howard.....	Big Sioux.....																																			
Howell.....	James.....																																			
Huron.....																																				
Ipswich.....																																				
Kadoka.....	White.....																																			
Kennebec.....	Missouri.....																																			
Kidder.....	James.....																																			
Kimball.....	Missouri.....																																			
La Delle.....	James.....																																			

DISTRICT No. 6. CLIMATOLOGICAL SUMMARY.

NOVEMBER, 1909

TABLE 2.—*Daily precipitation for November, 1909. District No. 6—Continued.*

TABLE 2.—*Daily precipitation for November, 1909. District No. 6—Continued.*

DISTRICT No. 6. CLIMATOLOGICAL SUMMARY.

NOVEMBER, 1909

TABLE 2.—*Daily precipitation for November, 1909. District No. 6—Continued.*

TABLE 3.—*Maximum and minimum temperatures at selected stations, November, 1909. District No. 6, Missouri Valley.*

Date.	Wyoming.														Montana.																			
	Basin.		Cheyenne.		Fort Laramie.				Lander.				Newcastle.				Pathfinder.		Sheridan.		Yellowstone Park.		Billings.		Dillon.		Havre.		Helena.		Lewiston.		Malta.	
					Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.			Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.				
1...	56	26	55	38	65	19	60	25	68	36	.....	.....	51	24	40	31	55	30	64	27	52	31	49	37	64	35	53	28	.....	.....		
2...	63	28	63	43	75	25	67	28	70	34	.....	.....	72	25	51	37	72	26	69	26	64	30	62	38	67	36	67	28	.....	.....		
3...	60	28	70	33	79	24	67	30	61	32	.....	.....	74	33	56	37	70	34	71	25	66	50	68	46	59	28	70	37	.....	.....		
4...	64	30	70	36	76	23	66	27	56	30	.....	.....	68	26	56	29	71	26	67	23	56	40	59	35	68	34	61	42	.....	.....		
5...	67	27	67	36	75	21	61	27	63	28	.....	.....	68	24	57	29	66	23	70	29	60	30	65	33	68	34	65	32	.....	.....		
6...	65	24	69	33	76	20	60	23	60	26	.....	.....	59	20	42	29	58	23	70	24	42	24	46	31	50	40	51	34	.....	.....		
7...	60	22	50	31	56	29	49	26	58	30	.....	.....	54	24	44	27	56	25	66	23	49	15	43	24	57	18	47	14	.....	.....		
8...	54	24	48	23	53	25	53	21	56	28	.....	.....	48	23	50	28	40	22	64	26	58	23	60	29	54	27	59	18	.....	.....		
9...	50	28	63	35	51	28	60	29	60	32	.....	.....	67	27	48	31	58	25	65	23	49	30	55	39	60	34	52	32	.....	.....		
10...	52	22	52	31	57	27	49	33	50	31	.....	.....	54	30	35	24	56	26	62	22	37	28	42	33	47	26	42	32	.....	.....		
11...	65	26	46	26	53	23	42	15	51	24	.....	.....	40	23	33	14	60	26	61	19	29	16	38	29	33	24	37	24	.....	.....		
12...	46	14	30	22	33	23	37	19	46	24	.....	.....	36	20	32	9	41	17	53	14	17	12	29	19	24	14	26	8	.....	.....		
13...	35	10	24	17	28	22	34	15	30	20	.....	.....	25	13	22	4	27	16	41	10	16	11	19	3	20	3	16	3	.....	.....		
14...	30	0	18	11	20	15	17	6	20	10	.....	.....	15	10	8	-1	20	5	36	5	12	-12	14	1	11	-7	14	6	.....	.....		
15...	35	10	17	10	22	13	17	-4	14	8	20	-2	29	0	12	-10	33	-8	5	-16	19	-2	15	-12	1	1	1	1	1	10		
16...	42	22	37	17	33	0	27	-3	30	4	.....	.....	36	4	28	11	22	4	34	10	20	-9	39	13	35	9	23	2	.....	.....		
17...	46	27	39	20	43	15	31	6	35	8	42	7	34	20	38	12	50	20	15	0	38	25	45	22	20	9	9	9	10			
18...	47	30	50	35	56	10	51	19	40	15	63	21	42	29	46	19	56	24	56	15	57	29	53	40	51	9	51	9	10			
19...	43	31	53	43	61	31	55	35	45	28	64	47	39	32	60	36	57	28	54	12	51	37	50	42	52	26	32	3	10			
20...	42	27	58	30	64	41	56	32	50	28	59	23	41	23	59	22	50	26	18	-5	42	30	52	27	29	3	2	2	10			
21...	44	26	39	28	36	33	42	25	38	19	31	15	36	22	31	16	52	25	-4	40	24	40	15	18	2	2	2	2	2	10		
22...	48	24	49	23	54	14	56	22	36	30	52	9	45	29	29	12	46	24	37	-14	53	27	50	21	23	13	13	23	20	10		
23...	40	24	58	45	65	16	59	35	50	22	63	36	45	34	54	16	49	30	55	37	53	41	53	17	47	18	18	18	18			
24...	48	27	60	37	66	34	60	32	52	24	60	32	44	37	60	27	50	29	49	11	50	32	56	30	49	17	47	17	18			
25...	47	24	56	30	63	33	58	26	45	20	40	28	39	32	62	27	47	31	20	12	38	31	41	22	18	4	4	4	18			
26...	47	24	61	36	52	33	58	31	48	18	35	29	34	21	31	25	43	29	28	18	35	28	37	21	24	14	14	14	14			
27...	37	23	38	23	35	31	31	5	47	16	33	4	28	9	34	23	40	5	40	15	36	23	40	5	32	4	4	4	13			
28...	34	18	31	12	40	12	23	-4	42	19	41	4	31	11	36	7	39	8	53	33	41	24	59	21	44	16	16	16	13			
29...	32	10	35	26	47	15	31	5	48	24	.....	.....	48	20	40	18	43	10	50	24	65	45	56	29	63	36	52	42	42	42		
30...	37	20	46	27	56	27	31	7	54	18	47	23	38	24	52	30	51	28	66	31	55	30	55	24	50	32	32	32	32			
31...																																
Mns	47.9	22.5	48.4	28.7	53.0	22.7	46.9	19.8	47.1	22.8	48.8	20.7	38.9	22.7	47.3	20.0	53.5	21.0	40.0	17.9	45.1	27.3	47.5	22.9	40.2	16.5						

Montana.				North Dakota.												South Dakota.												
Date.	Miles City.		Poplar.		Berthold Agency.		Bismarck.		Dickinson.		Jamestown.		Williston.		Aberdeen.		Chamberlain.		Huron.		Kadoka.		Lemmon.		Pierre.		Rapid City.	
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.
1...	58	34	55	33	59	32	60	22	58	32	63	18	56	30	65	27	.....	.....	60	29	62	25	59	26	64	28	61	32
2...	75	32	67	30	70	23	65	25	71	28	57	21	68	27	66	30	.....	.....	59	30	71	29	72	34	70	34	73	28
3...	76	48	68	40	66	38	68	40	66	38	65	35	64	43	70	33	.....	.....	72	44	68	28	69	40	74	46	75	42
4...	70	36	62	37	64	34	66	35	65	34	65	34	59	38	73	35	.....	.....	73	36	66	29	67	37	77	41	69	41
5...	60	32	69	32	60	30	65	37	62	32	58	31	66	36	70	33	.....	.....	69	37	64	34	61	32	67	37	65	36
6...	58	30	58	26	57	31	55	35	60	26	67	31	57	34	75	33	.....	.....	76	34	75	39	64	30	81	40	75	37
7...	50	26	48	18	51	26	46	20	44	20	59	25	47	18	55	35	.....	.....	54	25	79	35	54	25	53	31	48	31
8...	58	35	58	15	50	16	47	13	49	19	45	8	51	21	38	15	.....	.....	46	17	60	22	48	23	51	23	55	28
9...	55	29	56	23	56	26	55	33	62	24	52	29	55	14	58	14	.....	.....	57	35	36	60	30	66	42	74	38	
10...	48	36	45	30	40	25	54	34	52	31	65	40	36	30	70	33	.....	.....	69	36	38	54	32	63	40	59	36	
11...	36	26	36	25	38	28	36	20	34	22	42	27	32	17	41	25	.....	.....	43	25	24	39	26	45	29	43	29	
12...	26	20	33	12	30	.....	24	16	14	32	18	17	8	32	18	.....	.....	33	18	30	24	19	34	20	32	26		
13...	26	12	17	9	16	11	19	13	16	9	22	10	15	8	32	17	.....	.....	28	20	29	18	27	11	28	20	26	
14...	14	0	17	-1	17	9	16	4	15	1	21	10	14	-5	22	15	.....	.....	20	7	19	11	13	8	20	14	17	
15...	22	-4	23	-11	19	-13	15	-4	15	-15	16	9	20	-10	15	-5	.....	.....	20	0	15	10	13	-1	15	10	14	
16...	26	-5	22	-6	17	1	21	9	16	-10	22	9	22	-3	23	0	.....	.....	18	9	19	6	18	11	19	8	35	-2
17...	21	1	27	4	22	-1	22	8	18	-6	22	6	21	-2	23	-3	.....	.....	16	6	22	5	15	1	17	11	28	9
98...	56	14	48	12	48	10	48	10	47	9	36	12	45	14	30	0	.....	.....	33	6	42	8	44	7	38	8	61	23
19...	56	34	43	31	56	27	60	28	55	30	44	14	44	22	44	6	.....	.....	47	19	52	36	36	31	49	25	64	44
20...	42	22	32	5	38	12	32	7	49	14	44	15	22	-1	30	21	.....	.....	37	19	45	24	43	19	41	22	54	30
21...	35	18	20	10	19	4	20	4	25	10	16	10	21	3	33	-1	.....	.....	19	1	46	15	20	10	22	7	26	16
22...	38	28	39	10	24	12	18	8	23	7	15	2	27	15	33	3	.....	.....	19	10	31	11	20	12	19	14	28	15
23...	56	32	49	20	49	17	42	16	58	18	37	12	45	21	38	7	.....	.....	38	19	50	19	55	19	47	19	62	24
24...	66	38	50	20	64	15	63	23	62	32	47	15	54	15	30	16	.....	.....	42	27	56	36	53	23	50	34	62	36
25...	40	25	40	22	46	8	27	16	50	12	46	15	18	8	30	15	.....	.....	37	25	41	29	43	16	35	27	49	30
26...	30	28	29	16	21	16	22	17	25	20	21	15	22	16	29	23	.....	.....	39	28	51	26	25	23	30	28	33	27
27...	38	28	30	12	36	17	34	13	36	21	26	13	34	17	29	20	.....	.....	29	23	31	27	22	33	26	33	18	20
28...	50	24	45	5	48	6	38	5	49	12	27	2	45	15	28	0	.....	.....	30	14	41	27	33	13	34	16	43	10
29...	53	31	53	28	64	25	48	24	62	26	34	20	51	30	38	7	.....	.....	36	13	42	28	48	22	45	27	62	24
30...	52	33	48	35	59	26	54	33	58	31	37	27	53	32	40	11	.....	.....	38	34	50	28	52	36	62	36	38	36
31...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Mns	46.5	24.7	42.9	18.1	43.5	17.6 ^a	41.3	18.8	44.9 ^a	18.0	40.1	17.8	39.3	17.4	41.8	16.3	.....	.....	41.9	21.5	46.4 ^d	24.1 ^a	42.5	21.0	44.6	25.4	49.6	25.5

DISTRICT NO. 6. CLIMATOLOGICAL SUMMARY.

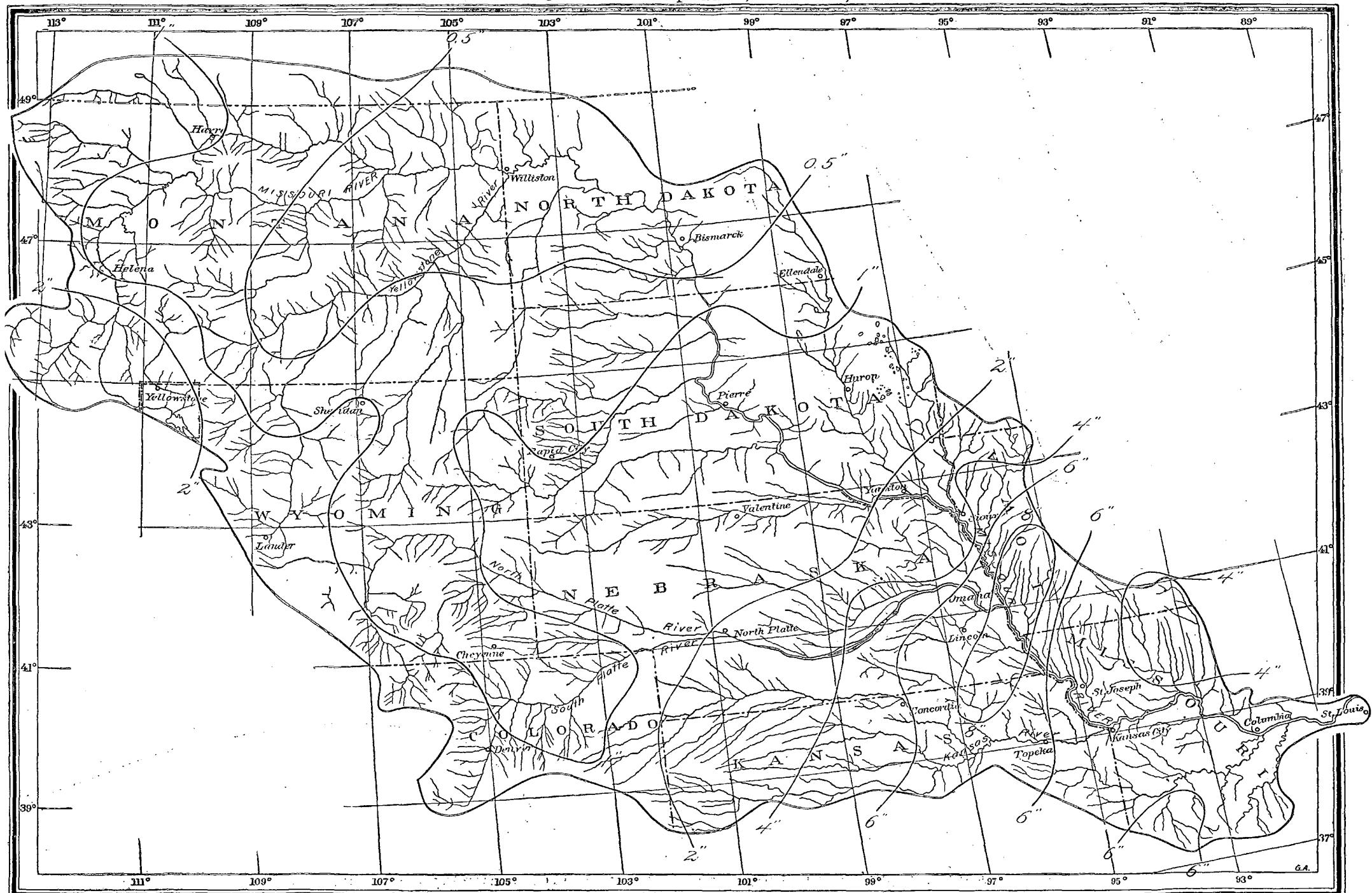
NOVEMBER, 1909

TABLE 3.—Maximum and minimum temperatures at selected stations, November, 1909. District No. 6—Continued.

Date.	South Dakota.						Colorado.						Nebraska.												North Platte.			Oakdale.			Omaha										
	Sioux Falls.			Watertown.			Yankton.			Denver.			Wray.			Alma.			Bridgeport.			Grand Island.			Hay Springs.			Hebron.			Lincoln.			North Platte.			Oakdale.			Omaha	
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.							
1...	58	30	60	32	61	37	64	32	69	26	69	55	75	30	62	28	62	18	63	35	64	45	69	27	61	37	61	44	61	44	61	44									
2...	60	40	67	30	62	36	68	40	75	28	68	30	72	29	62	30	70	23	75	37	66	40	73	26	62	29	61	44	61	44	61	44									
3...	75	35	68	32	75	45	75	41	85	35	82	35	76	29	78	40	75	32	80	38	77	46	80	35	74	38	75	46	74	34	76	49	76	49							
4...	79	40	73	35	81	38	73	38	76	30	80	34	75	25	76	36	78	26	78	40	80	41	81	31	74	34	76	49	76	49	76	49	76	49							
5...	74	42	61	39	71	43	74	38	79	30	78	36	73	22	72	38	77	22	74	45	78	44	76	33	73	34	77	50	73	34	77	50	73	34							
6...	68	34	74	39	77	37	75	40	76	35	74	39	70	22	72	48	77	24	57	29	75	52	76	34	73	38	72	54	72	54	72	54	72	54							
7...	66	29	61	36	58	30	52	34	59	31	63	42	74	21	56	44	51	32	64	31	58	41	55	25	54	32	60	42	60	42	60	42	60	42							
8...	64	22	46	15	48	20	45	26	56	17	55	23	60	20	53	28	52	18	61	45	50	29	54	18	48	16	50	32	48	16	50	32	48	16	50	32					
9...	55	40	54	31	57	33	68	35	68	31	65	30	62	20	60	41	60	30	72	48	60	43	66	33	57	30	56	44	56	44	56	44	56	44							
10...	72	36	69	41	76	44	62	38	63	45	78	50	60	20	66	38	55	32	60	35	71	54	66	40	73	48	69	53	73	53	73	53	73	53							
11...	63	30	50	29	53	28	50	27	56	24	62	45	52	19	60	38	48	20	67	33	65	42	57	36	53	34	63	43	63	43	63	43	63	43							
12...	47	28	35	18	33	26	40	26	35	32	45	34	40	28	37	30	39	20	40	25	42	32	37	28	34	26	43	33	43	33	43	33	43	33							
13...	42	28	30	23	34	31	28	24	32	25	43	30	28	20	38	31	28	16	32	21	38	34	29	21	33	24	41	37	41	37	41	37	41	37							
14...	36	18	27	15	31	13	26	16	26	15	31	23	20	12	40	24	16	7	30	11	35	23	23	16	24	12	37	22	37	22	37	22	37	22							
15...	18	8	17	0	23	10	13	10	18	13	30	19	17	12	29	22	19	8	29	15	29	19	17	12	22	10	30	20	30	20	30	20	30	20							
16...	21	6	21	13	22	10	45	9	37	5	27	11	32	3	25	11	30	-3	32	16	29	17	30	2	18	10	30	16	30	16	30	16	30	16							
17...	20	4	19	4	18	9	38	15	41	5	31	4	32	1	36	9	35	10	45	27	28	16	29	2	19	6	24	14	24	14	24	14	24	14							
18...	40	16	30	1	40	9	63	29	48	11	40	1	46	8	34	12	46	8	58	31	44	15	41	4	39	0	44	16	44	16	44	16	44	16							
19...	45	30	40	16	49	25	63	40	53	27	50	18	65	27	46	30	57	28	66	29	58	33	45	24	46	24	56	34	56	34	56	34	56	34							
20...	40	32	37	21	49	26	71	42	68	32	55	24	68	35	47	34	48	32	50	28	66	34	50	30	48	25	56	44	56	44	56	44	56	44							
21...	42	34	23	1	26	17	45	33	51	26	40	26	48	24	28	21	33	22	42	21	34	25	31	20	25	18	32	25	32	25	32	25	32	25							
22...	49	21	8	25	13	29	60	29	46	22	39	22	42	12	36	21	33	7	42	25	29	22	36	17	25	16	28	23	28	16	28	23	28	16	28	23					
23...	38	10	35	23	43	24	70	43	70	28	57	28	60	35	42	26	62	62	30	48	31	41	26	60	30	30	20	38	24	38	24	38	24	38	24						
24...	46	20	41	27	54	31	67	40	74	33	66	33	61	34	59	38	60	32	68	34	65	41	65	41	70	36	55	35	66	35	66	35	66	35	66	35					
25...	58	30	39	27	49	27	73	34	66	30	63	29	63	27	64	35	56	30	65	35	68	37	65	33	63	31	67	40	64	37	64	37	64	37	64	37					
31...																																									
Mns.	49.8	23.2	43.0	22.3	47.8	23.8	54.8	30.6	56.0	26.3	54.5	30.2	50.2	33.9	21.9	50.9	31.6	49.8	21.6	55.4	31.8	53.7	34.8	51.4	25.8	47.6	26.1	52.2	35.6	52.2	35.6	52.2	35.6	52.2	35.6	52.2	35.6	52.2	35.6		

Date.	Iowa.						Kansas.						Missouri.																											
	Valentine, Nebr.			Clarinda, §§			Sibley, §§			Sioux City.			Colby.			Concordia.			Salina.			Topeka.			Wakeeney.			Columbia.			Kansas City.			St. Louis.			Unionville, §§			
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.						
1...	64	24	56	46	58	33	60	41	71	31	66	44	71	42	68	48	65	38	61	49	63	48	62	54	56	50	56	50	56	50	56	50	56	50	56	50				
2...	72	25	65	40	58	33	59	38	85	35	71	39	75	44	72	40	76	36	67	43	68	46	65	50	66	44	66	44	66	44	66	44	66	44	66	44				
3...	76	35	77	37	71	32	72	44	82	41	80	47	78	44	81	51	85	35	74	44	78	41	73	54	74	56	76	44	76	56	76	44	76	56	76	44	76	56	76	44
4...	77	32	78	36	75	35	75	41	80	27	82	43	80	40	82	46	80	40	78	41	78	41	73	54	74	56														

District No. 6.—Total Precipitation, November, 1909.



District No. 6.—Departure of the Mean Temperature from the Normal, November, 1909.

